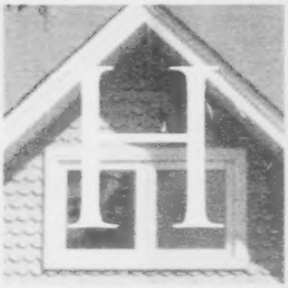

# HOUSING EXPORTS

## PENETRATION OF THE MULTIPLE HOUSING SECTOR IN THE UNITED STATES

Housing
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# Summary

This document is intended to be used as a reference tool by prime contractors and trade contractors alike working in the contractual construction industry and who envision expanding their business into the United States. The purpose of this study is to identify the ten American metropolitan regions that offer the highest potential concerning residential real estate, particularly apartment complexes, and the ten metropolitan regions of the eastern United States that offer the highest potential for non-residential real estate. The study also outlines the methods used by the current exporters to bypass any barriers to entry.

Multiple residential real estate has a high potential in the Eastern United States among households between 45 and 64 years of age. The population of Florida is rising steadily at a rate of 1.5% per year. Washington and suburban New York have also experienced a high level of immigration of households without children. New York and Miami support density better than Boston, Charlotte and Columbus. In the Western United States, the construction of multiple homes is very prevalent in Seattle. Austin has also experienced a substantial amount of immigration of households without children. Portland is particularly favoured by young families.

There is a surplus of new office space in certain markets. However, the development of the services sector and the obsolescence of existing buildings feeds demand. In the East, cities of international renown such as New York, Washington and Miami have not developed sufficiently to meet all of their needs. Incidentally, demand is generated by contracting out and the use of the Internet. On this account, Boston, northern Virginia to Washington and central New Jersey to New York have experienced reasonable growth, yet they are held back by strict regulations. Quality of life and a favourable business environment are the principal factors which influence location. In this respect, Charlotte and Columbus are capable of capitalizing on new technology. Orlando, however, which boasts a more diversified economy, is experiencing the highest growth in the job market in North America.

Current exporters wish to increase activity in the United States. The limited local market is pushing them to expand in a better planned way. For the majority of them, physical accessibility and the size of the region are the main criteria for location. Exporters also choose the region according to their personality, culture, and personal comfort level with the region. An attitude adapted to the local market is required.

Studying the barriers to entry and growth in the American marketplace has shown that market penetration is difficult. American builders comprise an organized, integrated group. Obstacles can be overcome if the builders are assured of a partnership, a lasting commitment, and the allocation of the best human resources to conquer the market. Four qualities are essential in order to succeed: expediency, sharing, strategy and perseverance.

# Executive Summary

## Introduction

This document is intended to be a reference tool for prime contractors and trade contractors alike who desire to expand their operations to the United States. The purpose of this study is to identify the ten American metropolitan regions that offer the highest potential in residential real estate, particularly apartment complexes, as well as the ten metropolitan regions of the Eastern United States that offer the highest potential in non-residential real estate. The study has also served to identify barriers to entry as well as the methods used by the contractors currently working in the American marketplace in order to bypass the barriers and penetrate the market.

Essentially, the first part of this article outlines the methodology used to conduct this study. Chapter 2 begins with a brief description of the American economic situation and its effect on real estate. Next, each sector is examined (residential, offices, shopping centres and hotels) including, as points of reference, a series of statistics on the major metropolitan regions. From this study it appears that the American market holds extraordinary potential for the exportation of construction services, due as much to its future growth as its size, in addition to its proximity.

## Economic Conditions and Long Term Potential

In the short term, annual growth at a rate of 3.9%, as has been recorded since 1996, is no longer tenable without increasing salaries, interest rates and prices. In 2001, however, growth at a rate of 2.5% is anticipated. May 2000 brought the sixth rise in interest rates by the Federal Reserve System since June of 1999 and the mortgage rates held at 5.5%, which exceeded the inflation rate. Two threats appeared on the horizon. On the one hand, the savings rate reached its lowest level and American consumers are greatly influenced by the stock market's performance. On the other hand, in 1999, the trade deficit reached a record level of $338.9 billion. Foreign investors hold 40% of all American bonds and they may be tempted to liquidate a portion of it if they think that interest rates will rise, and that the American dollar will depreciate, which could accelerate the fall of the markets.

In the long term, however, it is predicted that the number of households will increase by 1.2 million per year for the next ten years and that the population will reach 300 million by the year 2010. In addition, a boom is expected in the services industry which is commensurate with the increased number of computerized Americans. Consequently, a boom is expected in technological areas such as Boston, northern Virginia and the research triangle in the Eastern United States, and in areas such as Austin, Seattle and Portland in the Western United States.

Table 1 compares construction in Canada to that of the United States in 1999. It is evident that the market in the States is six to twenty times larger than in Canada. In the service industry, which is growing quickly, the construction of office buildings was 16 times more prevalent than in Canada in 1999.

Penetration of the Multiple Housing Sector in the United States

Table 1: Building Construction in the United States and Canada in 1999

| | United States | Canada | Multiplier |
|---|---|---|---|
| *Residential* Multiple | 342 000 units[2] | 57 778 units[4] | 59 |
| *Non-residential* | | | |
| Offices | 139.9 million sq. ft.[1] | 8.8 million sq. ft.[5] | 159 |
| Commerce | 279.0 million sq. ft.[6] | N/A | |
| Industry | 162.9 million sq. ft.[1] | 24.0 million sq. ft.[5] | 68 |
| Hotels | 148 200 rooms[3] | 6 455 rooms[3] | 229 |

Sources: 1. SIOR 2. Bureau of the Census 3. Smith Travel Research 4.CMHC 5. Royal Lepage 6. McGraw Hill

In the year 2000, the American real estate markets reached a general state of equilibrium and rentals increased in all sectors. Since economic cycles follow North American markets, a contractor must not view a capital investment in the United States as diversification of his operations, but instead as an expansion of them. However, the cycles can differ dramatically depending on the type of buildings and the region. In fact, real estate markets are not only affected by the stability of the economy, but also by migration and the degree of synchronization between supply and demand. It is predicted that by 2010, more than one quarter of the American population will reside in Florida, Texas or California.

The builders-exporters we interviewed wish to expand their activities in the United States. A limited local market and a desire for better planned growth is prompting them to take a greater interest in the United States' market. The majority would prefer to expand there by initiating projects that fill a niche in the market. For the most part, physical accessibility and the size of the region were the main criteria in choosing a construction site. In addition, many of them mentioned that the number of direct flights departing from their region of origin was also an important consideration due to the amount of travel demanded of a construction site worker on American soil.

## How to Interpret the Quantitative Data

Contractors will benefit from using the tables to choose a region and comparing it to other regions.

It is important at this point to provide clarification concerning the criteria used to differentiate the regions. First, one must note that the risk linked to market demand is more significant in smaller regions and in regions that are very specialized or dependent on only one business sector, like tourist regions. This volatility is much more significant than the abundance of available land. In contrast, the risk associated with market supply is more significant in the larger regions where production restrictions are numerous. In fact, construction delays are lengthy where land and labour are scarce and where regulations are strict. Moreover, we have neglected the regions containing less than one million inhabitants.

The four criteria used to differentiate the larger regions are as follows:

- Market depth: The amount of construction must be significant enough to reduce the risk of take-over by a single project.
- Intensity of operations: The higher the ratio of construction per capita, the more active the market.
- Equilibrium of supply and demand in each of the markets: We leave ourselves open to the risk of a take-over if supply exceeds demand when the vacancy rate is elevated.
- Probability of appreciation of the market within the next 5 years: There were construction jobs, particularly in the markets, that projected a future surplus in demand.

## Residential Real Estate

In this section we will illustrate that residential construction has a strong possibility for growth. Certainly, the single family home continues to be the most favoured in this market. However, multiple residences are more popular in the Eastern United States than in the Western United States. In addition, contrary to what one might expect, the greatest demand for rental units comes from households aged 45-64 years. It is predicted that this figure will experience an annual growth of 6.6% over the next ten years, whereas for rental households aged 65 years and older, a growth of only 2.3% is expected. It is important to note that housing for the elderly seems to be particularly abundant in the Southeast. In response to the demand of those aged 45-64 years, housing featuring finishing touches, design, amenities, security, services and space is required. The recent rise in interest rates favours rental units, especially in regions where property costs, including municipal taxes and tax deductions on mortgage interest are reasonable compared to the average income.

Penetration of the Multiple Housing Sector in the United States

Performance measures concerning the *multiple residence sector* in regions possessing high potential are illustrated in Table 2. In the Eastern United States, Florida's population is climbing steadily at a rate of 1.5% per year, and this influx contributes to an increase of available labour. Washington and suburban New York also boast a high immigration of households without children. We also note that the population density in Chicago, Boston, Charlotte and Columbus is less. However, a comparative cost analysis of housing with regard to property and location allows us to predict that it would be profitable to construct rental units in Chicago, central New Jersey and Boston. Moreover, only New York and Boston have a vacancy rate which is comparable to Canadian cities. While Boston loses its families with children, Charlotte welcomes them.

In the long term, both Washington and Boston are experiencing a shortage of labour, despite high rates of university graduates. It is interesting to note that in general, women prefer the East coast to the West coast. This finding is significant in the context of a shortage of qualified labourers and an increase in the number of women in the workforce.

In the Eastern United States, Seattle possesses a high concentration of university graduates and the construction of multiple residences is preferable. Austin has also experienced a phenomenal influx of households without children. Young families favour Portland. San Jose and Austin can handle increased population density better than Portland and Denver. As well, a comparative cost analysis of housing with regard to property and location allows us to predict that it would be profitable to construct rental units in San Jose, Austin and Seattle. We also note that in the West, there are a greater number of cities in which supply is less than demand than in the East. The work force is diversified in San Jose and Fort Worth.

**Table 2: Performance Measures in Regions of Potential Multiple Residences- 1999**

| Selected Regions in Greater | Density Index Constructed | No. of Multiple Residences | Vacancy Rate | No. of households (in thousands) |
|---|---|---|---|---|
| Performance gages | More than 3 | More than 2 800 | Less than 8.5% | |
| **More than 3.7 million** | | | | |
| Washington | 4.86 | 8 292 | 6.60% | 127.40 |
| Chicago | 2.83 | 6 998 | 6.50% | 56.93 |
| New York | 18.84 | 6 385 | 4.70% | N/A |
| Miami | 10.32 | 5 109 | 8.50% | 16.10 |
| Fort Worth-Arlington | 5.07 | 3 580 | 6.10% | 37.67 |
| San Jose | 10.15 | 3 493 | 2.10% | 31.72 |
| Boston | 3.03 | 1 346 | 3.10% | 49.11 |
| **2- 3.7 million** | | | | |
| Seattle-Tacoma-Bremerton | 5.06 | 9 442 | 3.90% | 125.31 |
| Denver-Boulder-Greeley | 3.73 | 7 503 | 5.60% | 74.59 |
| Portland-Salem | 3.94 | 5 751 | 7.40% | 58.20 |
| San Diego | 4.17 | 3 521 | 4.20% | 87.57 |
| Minneapolis-St. Paul | 2.33 | 2 848 | 4.20% | 58.59 |
| **Less than 2 million** | | | | |
| Austin-San Marcos | 6.86 | 5 911 | 8.20% | 43.87 |
| Charlotte-Gastonia-Rock Hill | 3.02 | 4 956 | 7.90% | 18.59 |
| Columbus | 3.08 | 3 506 | 7.40% | 35.70 |
| Montreal | | 3 457 | 3.00% | |
| Toronto | | 5 489 | 0.90% | |
| Vancouver | | 6 367 | 2.70% | |

## The Office Building Sector

The performance measures for the *office building sector* in the prospective areas are depicted in Table 3. Trends indicate continued pursuit of growth in the services industry, as well as the need of the business sector to relocate corporations in order to be closer to the pool of qualified labour. Quality of life and a favourable business environment are considerations which are becoming more and more significant in order to attract a capable labour force and performance-oriented businesses. Non-residential development, therefore, is directly linked to residential development. The obsolescence of existing buildings is accelerating due to the needs of technological infrastructure, without taking into account that consolidation in all sectors will follow. Suitable land and building sites are scarce, thereby augmenting the cost of construction.

A surplus of new office space is evident in certain markets. The current rise in rental costs remains constant and much greater than the inflation rate. We also note that risk in this sector is associated with overproduction which is not synchronized with demand. The main reasons for this inconsistency are: the shift in supply versus demand, the long period of adjustment of rents and uncertainty concerning the scope of the demand. Demand is greatly influenced by the economic base and the personality of the cities.

New York and Washington are cities of international renown. The vitality of New York stems from international immigration. Miami also depends on the economic health of Latin America. Neither city has reached a level of development which is currently able to truly meet its needs. Incidentally, current demand is generated by emerging industries of outsourcing and Internet services which have found a niche in today's market.

Three major cities in the Eastern United States have joined the Technological Conversion. Considerable expansion in the field of Biotechnology and the tremendous appeal of high technology has hit Boston's real estate sector head on, in the downtown core and in the suburbs. Spectacular growth is also evident from northern Virginia to Washington as a result of the ease of conducting business there. In addition, central New Jersey to New York welcomes contract specialists who supply the services to companies. This area is also known for its pharmaceutical sector. However, the market is restricted due to strict zoning legislation.

**Table 3: Performance Indicators in Potential Office Regions- 1999**

| | Construction (sq. ft. in thousands) | Construction/ Inventory | Vacancy Rate | Absorption/ (vac+constr) | Clerical Positions (in thousands) |
|---|---|---|---|---|---|
| *Performance gages* | *More than 500* | *More than 2.5%* | *Less than 9.6%* | *More than 0.15* | |
| Boston | 12 589 | 11.01% | 7.10% | 17 | 92 |
| Wash: North Virginia | 10 165 | 8.71% | 3.30% | 0.48 | N/A |
| Charlotte | 4 400 | 15.87% | 8.80% | 27 | 40 |
| Washington, DC | 4 346 | 4.89% | 4.40% | 0.25 | 117 |
| Chicago | 4 234 | 2.85% | 11.60% | -9 | 164 |
| New York-Manhattan | 3 293 | 0.97% | 7.10% | 0.15 | N/A |
| Wash: Sub Maryland | 2 845 | 4.31% | 7.30% | 0.15 | N/A |
| Orlando | 2 421 | 11.31% | 10.70% | 41 | 80 |

Penetration of the Multiple Housing Sector in the United States

| | | | | | |
|---|---|---|---|---|---|
| Columbus, Ohio | 2 090 | 6.67% | 4.50% | 0.21 | 37 |
| NY- NJ-Central | 1 595 | 2.39% | 10.70% | 0.45 | 47 |
| Baltimore | 1 445 | 3.66% | 9.80% | 48 | 43 |
| Miami | 1 429 | 4.67% | 10.30% | 26 | 41 |
| Tampa | 1 275 | 5.53% | 8.10% | 34 | 85 |
| Fort Lauderdale | 777 | 2.48% | 6.70% | 0.38 | 52 |
| Montreal | 755 | 1.35% | 14.40% | 2 | |
| Toronto | 2 503 | 2.23% | 11.00% | 8 | |
| Vancouver | 736 | 1.95% | 7.55% | 46 | |

Charlotte is part of a group of emerging cities. These cities are generally small and able to capitalize on new technology. Columbus also fits into this group. As a case in point, Charlotte has become the second largest financial centre in the nation with assets totalling $488 billion, mainly due to NationsBank and First Union. Charlotte attracts numerous call centres and processing centres which are on the rise. If the emerging cities are to grow, then access to a skilled labour force must never become restricted. This is one of the reasons that Florida's economy, which is more diversified than that of both Georgia and North and South Carolina, is not at as great a risk. Moreover, Orlando has experienced the highest employment growth in North America. The number of high tech companies located there has increased by 44% since 1997.

## The Hotel Sector

Performance indicators for the *hotel sector* in prospective regions are depicted in Table 4. The price per room has been climbing since 1990, but the amount of the increase has been diminishing each year since 1997. It is important to note that normally a high cycle such as this is followed by a cycle in which the cost is diminished for a long period of time. Moreover, the price is greatly influenced by any change in market demand: A hotel room is a non-essential commodity, and as such the risk of vacancy is great. Of those who offer hotel services, many consolidate under one banner, others do major renovations and develop new concepts (such as hotel suites and hotel boutiques), and most of the hotels in the high range go back to the drawing board. Amongst the applicants, it is predicted that tourists, comprised of baby-boomers who seek urban and cultural holidays will be more prevalent than clients travelling on business, comprised more and more of women. Again we note that Florida has captured much of this market.

**Table 4: Performance Indicators in Potential Hotel Regions in 1999**

| | Inventory 1998 | Construction 1998 | Increase in Price per room 1999-1998 |
|---|---|---|---|
| Orlando | 95 100 | 6 881 | -1.39% |
| Chicago | 73 400 | 4 155 | 2.88% |
| Atlanta | 77 100 | 4 089 | 2.62% |
| Washington | 71 800 | 3 223 | 6.33% |
| Fort Lauderdale | 25 300 | 3 029 | N/A |
| Miami | 41 500 | 2 275 | 6.17% |
| Boston | 36 800 | 2 116 | 1.32% |
| Tampa | 36 900 | 2 056 | 5.93% |
| New York | 68 300 | 1 666 | 3.14% |
| Philadelphia | 31 500 | 1 153 | 1.49% |
| Detroit | 33 500 | 495 | 8.63% |
| Montreal | 24 308 | 150 | 7.88% |
| Toronto | 32 250 | 322 | 9.60% |
| Vancouver | 18 623 | 1 612 | 2.71% |

## Other Sectors

The *industrial* sector is under-achieving and the larger markets such as Chicago and Atlanta are the most successful. We note that the recent devaluation of the American dollar in global markets could have a positive impact on the competitiveness of their goods both in foreign markets and in the industrial sector.

The winners in the *financial* sector are located in the Western United States. This sector is known for consolidation where Wal-Mart, for example, has displaced local chains. It is also known for electronic commerce which earned $10 billion in 1998 and will earn a projected $100 billion by the year 2003. No method of replication in the regional areas will be totally successful.

## Tools for Entering the Market

Chapter 3 describes in detail how to penetrate the American markets and succeed. First we will review specific barriers to entry, regulations, shortages of materials and labourers, and the nature of financing. Next, we will review real estate financing in great detail for the United States. The markets that finance real estate in the United States possess a greater abundance of liquid capital compared to Canada, which allows them to remain highly competitive. Obtaining credit is not a major obstacle as long as you provide the lender with a credible, well organized portfolio. We propose a presentation-type portfolio, recognized by all financial agents, which demonstrates the mastery the developer has over his product, and which summarizes the information in a credible fashion.

At the end of chapter 3 we will take another look at the summarized figures for each of the regions studied in chapter 2; regions which, in our opinion, possess the highest potential for development, and the least amount of risk of failure. However, each company must choose a region and employ an investment strategy according to its own personality and culture. We must ask ourselves the following questions: What type of risk are we willing to take? What rate of return do we expect?

For example, New York is an economically viable city: High rents and low vacancy rates prevail there. Even so, the contractors-exporters avoid it because land is scarce, regulations are numerous and its unions are very powerful. In addition, many exporters mentioned that Miami represents a very strong yet a very undisciplined market. South America is an open door, however, it contains numerous dealers, pushers and illegal immigrants. Although the local labour force is less unionized, and therefore less expensive, it is also less productive than in Canada. In addition, the transportation, sewage system, and airport infrastructure is aging and insufficient in many cities. In conclusion, a contractor must feel comfortable with the region, as he will be working there for many years.

The regional record, based on a review carried out by the specialized press, highlights many qualitative aspects concerning the growth of a city, including the physical infrastructure and business of the region. The alliances and demands of certain pressure groups, the attitude of the local government, necessary changes in the economic base, the novelty of certain districts and the state of transportation, sewage systems, and airport infrastructure are all considered.

## Personal Accounts

The methods used by present exporters to bypass the barriers to entry and the growth barriers in the present market are examined in chapter 4. Indeed, exporters of construction services are not taking full advantage of the available market in the United States. On one hand, the trade of services comprises only 12% of total trade, which falls below the global average of 19%. On the other hand, it is estimated that the revenue of Canadian contractors taken from international construction projects is less than 1%. Moreover, less than 50% of this revenue comes from the United States.

Why then is there such an under-representation of Canadian exportation of construction services to the United States? One part of the answer stems from the fact that operations of American corporations which are affiliated with Canadian businesses are only partly reflected in the payment balance. The other part of the answer stems from the semi-directed interviews which we conducted with current Canadian exporters. These interviews allowed us to gain a greater understanding of how to overcome the barriers to entry and growth in the marketplace more effectively. Indeed, the specific barriers explained in Chapter 3 are not those which suppress entry or growth, for it is simple enough to bypass these barriers. On the contrary, implicit barriers restrict exportation. Comments concerning these two types of obstacles are discussed below.

As for financing, the small builder discovered that his first project requires a fair amount of equity. Once it is completed and he has an American balance sheet, banks are receptive to financing a second project. In that regard, it is preferable to deal with a bank which is located near the project, so that it will be familiar with the micro-market and better able to understand and evaluate the project. It is necessary to have a permanent address and employment authorization, which shows that the builder is there to stay.

Concerning the labour force, we expect a national shortage of 250 000 construction workers by the end of the year 2000. It is also expected that the shortage will last for a period of 5-10 years. The problem concerning access to the labour force was less serious than we would have believed. When the need arises, big exporters employ Canadian sub-contractors, categorizing and qualifying them as specialized teams. We also note that the turn-over rate in domestic corporations in the work-force in the United States is higher than in Canada.

Distance financial management is restricted. The banking relationship between North and South is deficient. Indeed, there is no understanding between American and Canadian banks. Moreover, you must open an account in each of the cities as the American banking system is divided, and legislation differs according to state. Consequently, electronic payment of accounts is much less advanced there than in Canada.

Shortages of cement and structural steel are evident. New factories are currently being built to manufacture gypsum and brick which are also in short supply. Exporters indicate, however, that despite the shortages, supplies are sufficient enough and the rising costs which result are recovered in the price.

Although construction codes vary from city to city, it is easy to access them, understand them, and abide by them. As well, there is a strong progression toward standardization of the codes.

Therefore, formal barriers can be overcome with little difficulty. The informal or implied barriers, however, are the most harmful. We have grouped them according to the following three aspects: the necessity of forming partnerships, the duration of the commitment and the importance of quality resources used to conquer the market.

The best way to penetrate the American market is to become associated with local partners. On one hand, the use of intermediaries or financial officers makes it easier to obtain credit. The intermediaries are financial brokers, who have access to a wide network of contacts in institutional settings. The financial officers act on behalf of a group of lenders and look out for the interests of the applicant and the creditor alike. Canadian companies do not often seek the advice of these professionals. The requisite commissions which fluctuate between 1% and 2% depending on the type of docket, are largely recovered by the borrower in terms of efficiency and productivity. By securing ties with these suppliers, the contractor increases his or her chances of finding suitable sub-contractors.

On the other hand, the working model used in the domestic market does not directly transfer to the American market. The business conditions, practices and cultures vary locally. For example, one must be mindful of the fact that all documents must be translated using a vocabulary that will be understood at the local level. It is difficult to succeed in establishing oneself in a region without forming alliances. Local construction companies possess a competitive edge, manifested by the fact that they know how to interpret the codes and they are familiar with the local network of financial institutions and sub-contractors, attitudes of clients and business opportunities. In order to form alliances, therefore, we must prove our added value and the profit that the American partner will earn as a result of our participation. In any partnership, there are cultural differences to which one must adjust. In general, however, we can depend on the word of the Americans even though they are more mobile than Canadians. New exporters must concentrate their efforts in only one geographical region.

The second significant barrier we perceived concerns the depth of the commitment of the exporter to conquer the market. Some exporters have not cultivated relationships, nor invested in a permanent office, and today, they cannot really count on these experiences for their expansion. However, each person interviewed mentioned long delays and elevated initial costs that international projects entail. To be long lasting, the foray into the American market must first be integrated into the strategic plan of the company.

Developing a relationship with a client also demands a local presence, whether in a residential area or a non-residential area. As well, it is often necessary to move within a region. It is important to take the time to win the client's trust and become their supplier of choice. Companies that have established a permanent office have a much greater understanding of their market. They would not reduce their involvement in the American market, even though Canada has experienced growth in real estate, otherwise they would have to start over again as soon as the Canadian market took a downward turn. We note that the business climate is generally very litigious. Lawsuits are common and expensive, particularly with difficult clients, such as condominium associations or civil authorities, and with sub-contractors. California and New York tend to be more litigious than other states.

The third perceived barrier stems from the fact that the majority of exporters have not made use of sufficient resources to conquer the market. The more distinctive the services offered, the less earnest the competition and the more significant the profit margin. However, it is difficult for prime contractors to make themselves stand out. Furthermore, it is even more difficult to stand out in the non-residential sector, as it is possible to differentiate the residential product while remaining very close to the local product standard. More hard work and resources are needed in order to excel in matters of quality control, and the organisation of repayment schedules. Yet the Canadian construction industry mainly consists of a large number of small companies. The lack of human resources has caused many of them to surrender to exportation. Among the entrepreneurs who succeed, the best managers can be found on American job sites and they reside in the United States.

Americans are generally practical. They want to know what advantages they can glean from a business deal in terms of dollars and cents. Once again, however, even though the business atmosphere seems to be mercilessly competitive, one must not underestimate American patriotism. It is necessary to keep up the appearance of an American company. Some exporters have candidly admitted that during the first few years, they did not make a profit. However, one of them succeeded in increasing his profit margin after hiring dependable, competent American managers. Americans prefer to do business with entrepreneurs with whom they have already established a sense of mutual trust, through frequent meetings. Canadian managers have not attended a recognized American university or college and are not part of the brotherhood.

**1.1 Recapitulation of the Objectives** 5

**1.2 Geographic Breakdown** 5

**1.3 Data Limitations** 11

**1.4 Methodology and Organization of the Report** 11
  1.4.1 Predictive Capability of a Regional Economic Growth Index 11
  1.4.2 Analysis of the Secondary Data 11
  1.4.3 Case Studies of Current Exporters 12

**2.1 Reference Economic Scenario** 13
  2.1.1 Exchange Rate 13
  2.1.2 Interest Rate 14
  2.1.3 Productivity Gains and Job Creation 14
  2.2.1 Considerations on the Synchronization of the Economic and Real Estates Cycles 16
  2.2.2 The 1999 Real Estate Markets 16
  2.2.3 Definition of the Selected Indicators of Potential 20

**2.3 Metropolitan Market Ranking in the Multiple Housing Sector** 23
  2.3.1 Current American Trends 23
  2.3.2 Performance Indicators and Benchmarks 25

**2.4 Metropolitan Market Ranking in the Office Sector** 33
  2.4.1 A Brief Background 33
  2.4.2 The Tertiarization of the Economy and City Growth 33
  2.4.3 Current American Trends 34
  2.4.4 Estimates and Analysis of the Results 35

**2.5 Metropolitan Market Ranking in the Shopping Centre Sector** 42
  2.5.1 Data Availability: A Significant Limitation in this Analysis 42
  2.5.2 The Key Relations 42
  2.5.3 Current Trends 43
  2.5.4 Analysis of the Results 44

**2.6 Metropolitan Market Ranking in the Hotel Sector** 48
  2.6.1 A Few Concepts 48
  2.6.2 Industry and Product Characteristics 48
  2.6.3 Current American Trends 49
  2.6.4 Estimates and Analysis of the Results 50

**2.7 Conclusion of Chapter II** 56

**3.1 Entry Barriers and Means for Overcoming Them** 58
  3.1.1 Barriers Stemming from the Market 58
  3.1.2 Barriers Stemming from the Exporter 62
  3.1.3 Conclusion 64

**3.2 Real Estate Financing in the United States** 64
  3.2.1 Data on Financing in the United States 65
  3.2.2 Typical Underwriting Criteria 70
  3.2.3 Role of the Financial Agents and Intermediaries 71
  3.2.4 Optimal Presentation of a Financing Application 72
  3.2.5 Importance of Partnerships 74
  3.2.6 Main Observations 74

**3.3 Thematic Facts Sheets on the Areas with Good Potential** 74
  3.3.1 Introduction 74
  3.3.2 Construction of the Residential Fact Sheet 75
  3.3.3 Construction of the Non-residential Fact Sheet 78
  3.3.4 Presentation of the Fact Sheets for Each of the Areas 81

**4.1 Sample of our Interlocutors ........ 112**
4.1.1 Size of the Companies ........ 112
4.1.2 Definition of the Fields of Activity ........ 113

**4.2 Motives for Exporting: Survival and Growth ........ 114**

**4.3 Differentiated Activities and Vision of the Interlocutors ........ 115**
4.3.1 General Contractor ........ 115
4.3.2 Designers-builders ........ 116
4.3.3 Building Investors, Owners and Managers ........ 117

**4.4 Client Relations ........ 117**

**4.5 Triggering Element of Entry into the Market ........ 119**

**4.6 Commencement of Operations ........ 120**

**4.7 Physical and Cultural Proximity of the Market ........ 121**

**4.8 Strength of the Partnership ........ 122**

**4.9 Resources ........ 123**
4.9.1 Information on the Markets ........ 123
4.9.2 Land ........ 124
4.9.3 Financing and Taxation ........ 124
4.9.4 Materials ........ 125
4.9.5 Labour ........ 126
4.9.6 Distance Management ........ 127

**4.10 Building Codes ........ 128**

**4.11 American Nationalism ........ 128**

**4.12 Canadian Support ........ 128**

**4.13 Conclusion ........ 129**
Table A1- Population by Metropolitan Area ........ 140
Table A2- Units Allowed by Metropolitan Area, 1997 to 1999 ........ 142
Table A3- Rental Housing Vacancy Rate by Metropolitan Area - 1996-1999 ........ 145
Table A4- Non-agricultural Jobs by Metropolitan Area -(in 000) ........ 147
Table A5- Analysis of Metropolitan Areas of the Large Metropolitan Municipalities ........ 149
Table A6- Population and Job Estimates by Certain Metropolitan Areas ........ 151
Table B1- Office Market Data in 1997 ........ 152
Table B2- Office Market Data in 1998 ........ 154
Table B3- Office Market Data in 1999 ........ 156
Table C1- Industrial Buildings Market Overview by Metropolitan Area, 1999 ........ 158
Table D1- Retail Commerce Data by Metropolitan Area - 1997 ........ 160
Table E1- Characteristics of the Hotel Market ........ 161

# I- INTRODUCTION

## 1.1 Recapitulation of the Objectives

The objective of this study is to identify the ten American metropolitan areas that offer the most potential in the residential sector and the ten metropolitan areas in the Eastern United States that offer the most potential in the non-residential real estate sector. Its objective is also to indicate the methods for circumventing the entry barriers and for penetrating these markets.

Residential construction includes construction and renovation projects for residential buildings of four floors and more in all the regions of the United States. Since the breakdown of the official statistics provides aggregate results for the buildings with five or more units, we are obliged to use this definition for deriving the indicators of potential for buildings of four or more floors.

CMHC is also asking for an examination of the non-residential real estate development potential on the American East Coast. The Eastern Seaboard constitutes a market with interesting dimensions that is also at a reasonable distance for Canadian products, especially those from Quebec. According to our analysis proposal dated January 5, 2000, this sector includes office buildings, hotels and shopping centres. In actual fact, the penetration outlook for the industrial and institutional sectors did not appear sufficiently promising for us to examine them. On the one hand, the majority of the land available for industrial use is controlled by promoters who can rapidly deliver on demand and custom build the number of square feet required and who can meet the demand for the coming years. On the other, in the institutional domain, the contracts are primarily awarded by the local administrations and, in these cases, American nationalism constitutes such a high informal entry barrier that we advise Canadian builders not to attempt to penetrate the American market through this venue.

## 1.2 Geographic Breakdown

Using different reliable sources, we collected the most recent statistics on the indicators of potential in each of the market segments for the metropolitan areas. Among the common indicators, we note the region's physical accessibility. In the distant cities, the cost of transportation could reduce the profit margin. We also note the size of the area in these indicators. Certain areas are small and their population does not warrant a specific analysis. Indeed, high-rise construction requires a certain population density and market depth. Generally speaking, we therefore eliminated the areas with less than one million inhabitants. The population movements in these large areas between 1990 and 1998 are illustrated in figures 1, 2, 3 and 4. Here we note the southward and westward movements. It is anticipated that by 2010, more than one quarter of the American nation will live in Florida, Texas and California.[1] These movements also reflect the supply strength that we observe over the course of the analysis. We mention here that within the metropolitan areas, the population and the jobs tend to migrate into the suburbs.

In Table 1.1.1 we group the states by large region as indicated in the request for proposals. We indicate in Italics the area close to the Canadian border. We mention that the analysis of the non-residential sector focuses only on regions 1, 2, 3 and 4. However, for your guidance, we collected the statistics for all the areas and the statistics are included in the appendices to this report.

---

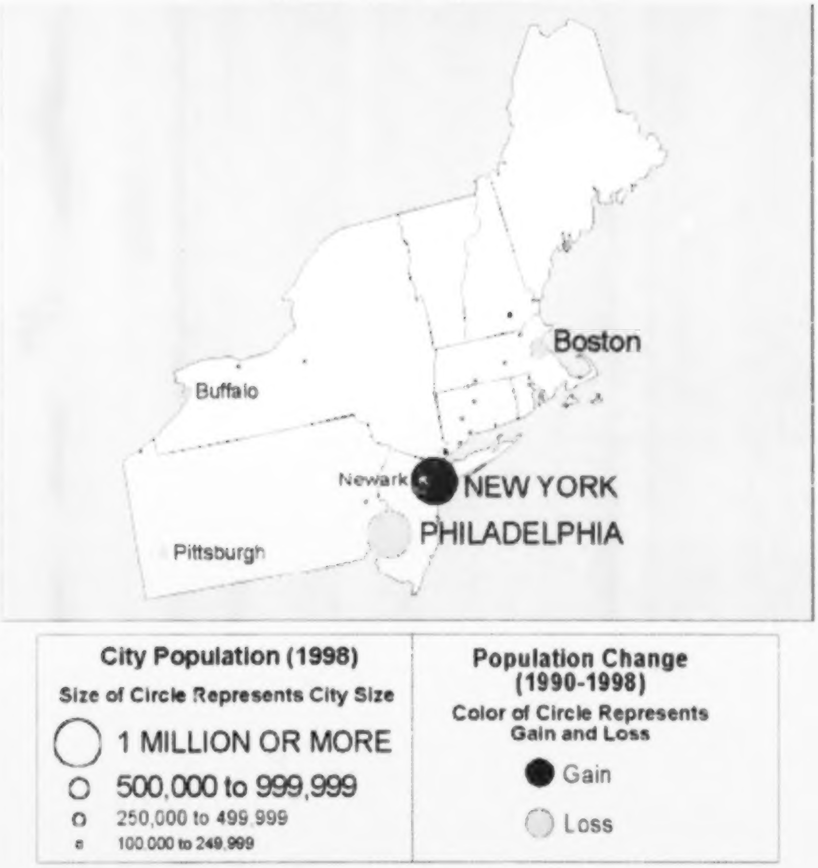
[1] Starr, E. and Drdla, R., 2000, *Opportunities for the Export of Canadian Products and Services*, CMHC.

Table 1.1.1.- Largest Metropolitan Markets by State, Region and Large Region

| Large region | Region | State | Metropolitan area |
|---|---|---|---|
| Northeast | 1-New England | Maine | Portland |
| | | Massachusetts | Boston-Worcester-Lawrence |
| | 2- Mid-Atlantic | New York and New Jersey | New York-NJ-Long Island |
| | | New York | Buffalo |
| | | Pennsylvania | Philadelphia-Wilmington-Atlantic City |
| | | Pennsylvania | Pittsburgh |
| South | 3A- SA-North | Maryland and DC | Baltimore-Washington |
| 3- South Atlantic | 3B-SA- Centre | North Carolina | Charlotte-Gastonia-Rock Hill |
| | | North Carolina | Raleigh-Durham-Chapel Hill |
| | | North Carolina | Greensboro-Winston-Salem-High Point |
| | | Virginia | Richmond-Petersburg |
| | | Virginia | Virginia Beach-Norfolk-Newport |
| | 3C- South | Florida | Jacksonville |
| | | Florida | Miami-Fort Lauderdale |
| | | Florida | Orlando |
| | | Florida | Tampa-St Petersburg-Clearwater |
| | | Florida | West Palm Beach-Boca Raton |
| | | Georgia | Atlanta |
| | | South Carolina | Charleston |
| | | South Carolina | Columbia |
| | | South Carolina | Greenville |
| Midwest | 4-Great Lakes | Illinois | Chicago-Gary-Kenosha |
| 4-Great Lakes | | Indiana | Indianapolis |
| | | Michigan | Detroit-Ann Arbor-Flint |
| | | Ohio | Cincinnati-Hamilton |
| | | Ohio | Cleveland-Akron |
| | | Ohio | Columbus |
| | | Wisconsin | Milwaukee |
| Midwest | 5A-PL- North | Minnesota | Minneapolis-St. Paul |
| 5- Plains | 5B-PL- Centre | Missouri | Kansas City |
| | | Missouri | St Louis |
| | | Nebraska | Omaha |
| South | 6-Central- Southeast | Tennessee | Nashville |
| | | Tennessee | Memphis |
| | 7- Central- Southwest | Texas | Dallas-Fort Worth |
| | | Texas | Houston-Galveston-Brazoria |
| | | Texas | Austin-San Marcos |
| | | Texas | San Antonio |
| | | Oklahoma | Oklahoma city |
| West | 8- Mountain | Arizona | Phoenix-Mesa |
| | | Colorado | Denver-Boulder-Greeley |
| | | Utah | Salt Lake City-Ogden |
| | | Nevada | Las Vegas |
| 9- Pacific | 9A-PA- North | Washington | Seattle-Tacoma-Bremerton |
| | | Oregon | Portland-Salem |
| | | California | Los Angeles-Riverside-Orange |
| | 9B- PA- South | California | San Francisco-Oakland-San Jose |
| | | California | San Diego |
| | | California | Sacramento-Yolo |

### Northeastern Cities by Population Size Category

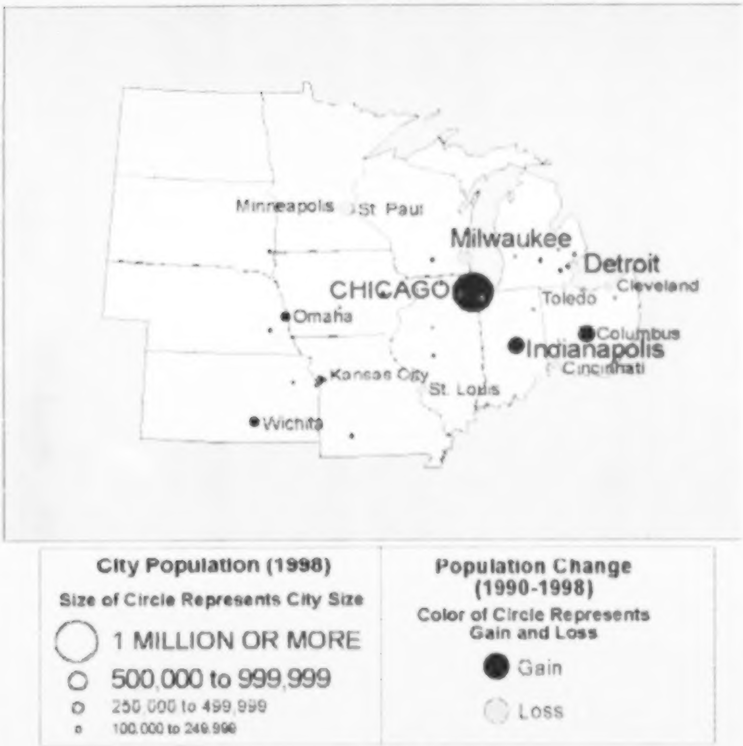
Gain and Loss from 1990 to 1998 for Cities
with 100,000 or More Population in 1998


Boston
Buffalo
Newark
NEW YORK
PHILADELPHIA
Pittsburgh
City Population (1998)
Size of Circle Represents City Size
1 MILLION OR MORE
500,000 to 999,999
250,000 to 499,999
100,000 to 249,999
Population Change (1990-1998)
Color of Circle Represents Gain and Loss
Gain
Loss

Source Population Estimates Program, U.S. Census Bureau

All the large northeastern cities have experienced population losses everywhere except New York. Very often, these losses are caused by overly high housing costs as compared with the prospects for wages and jobs.

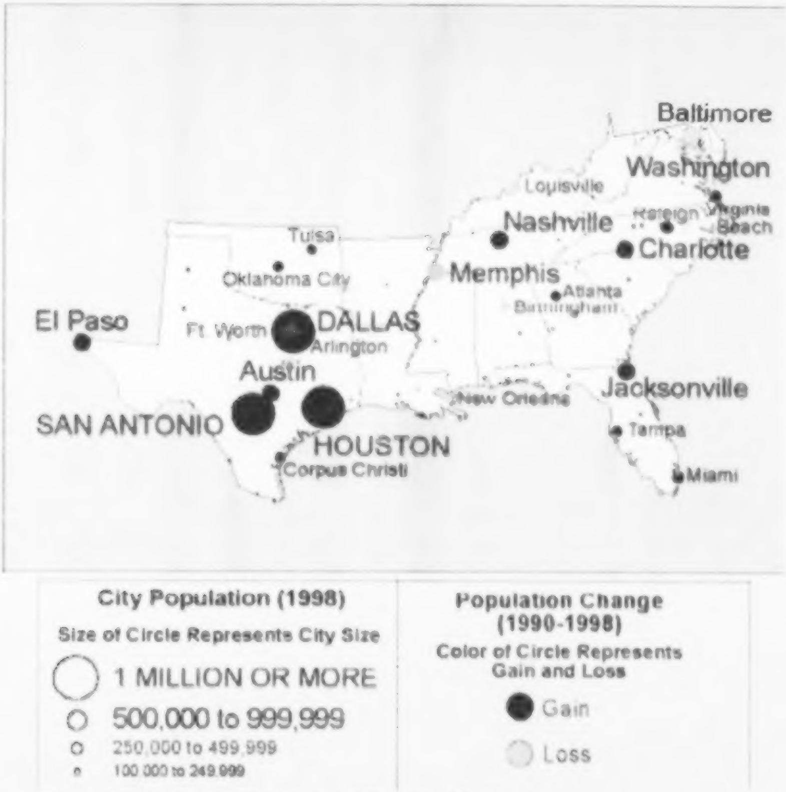
**Midwestern Cities by Population Size Category**
Gain and Loss from 1990 to 1998 for Cities
with 100,000 or More Population in 1998


Minneapolis
St Paul
Milwaukee
Detroit
CHICAGO
Toledo
Cleveland
Omaha
Columbus
Indianapolis
Cincinnati
Kansas City
St. Louis
Wichita
City Population (1998)
Size of Circle Represents City Size
1 MILLION OR MORE
500,000 to 999,999
250,000 to 499,999
100,000 to 249,999
Population Change (1990-1998)
Color of Circle Represents Gain and Loss
Gain
Loss

Source: Population Estimates Program, U.S. Census Bureau

The north of this region has experienced population losses. Very often, this zone has not ensured the transition of its traditional economy to the new technologies. The south of this region, on the other hand, is managing quite well.

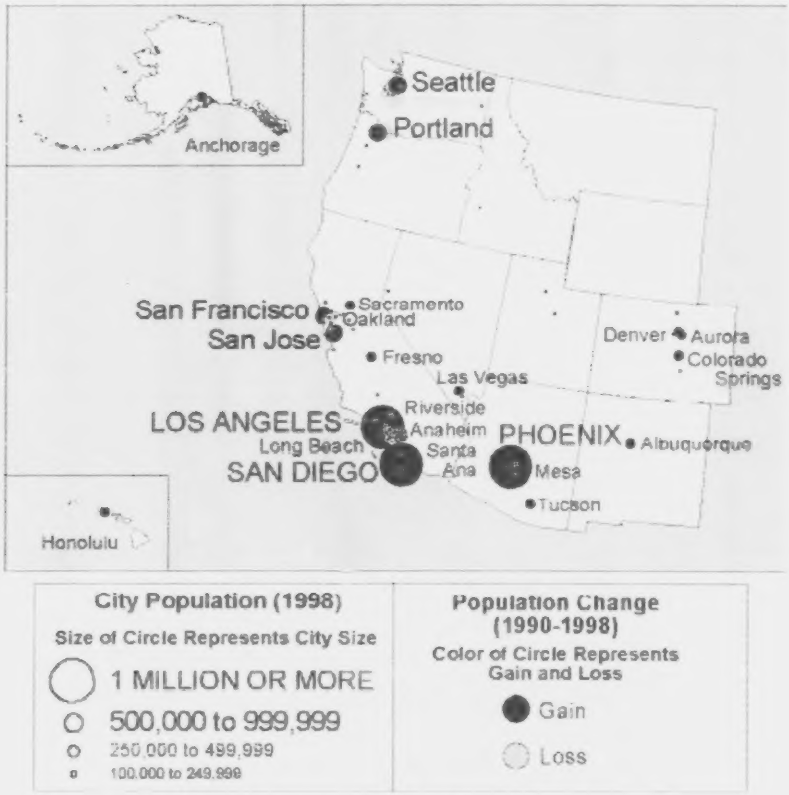
**Southern Cities by Population Size Category**
Gain and Loss from 1990 to 1998 for Cities
with 100,000 or More Population in 1998


Baltimore
Washington
Louisville
Nashville
Raleigh
Virginia Beach
Charlotte
Tulsa
Oklahoma City
Memphis
Atlanta
Birmingham
El Paso
Ft. Worth
DALLAS
Arlington
Austin
Jacksonville
New Orleans
SAN ANTONIO
HOUSTON
Tampa
Corpus Christi
Miami
City Population (1998)
Size of Circle Represents City Size
1 MILLION OR MORE
500,000 to 999,999
250,000 to 499,999
100,000 to 249,999
Population Change (1990-1998)
Color of Circle Represents Gain and Loss
Gain
Loss

Source: Population Estimates Program, U.S. Census Bureau

The entire south of this region has experienced good immigration. The transition towards the new economy and an immigration of senior citizens have ensured a great deal of vitality.

**Western Cities by Population Size Category**
Gain and Loss from 1990 to 1998 for Cities
with 100,000 or More Population in 1998


Anchorage
Seattle
Portland
San Francisco
Sacramento
Oakland
San Jose
Fresno
Las Vegas
Denver
Aurora
Colorado Springs
Riverside
LOS ANGELES
Anaheim
Long Beach
Santa Ana
SAN DIEGO
PHOENIX
Albuquerque
Mesa
Tucson
Honolulu
City Population (1998)
Size of Circle Represents City Size
1 MILLION OR MORE
500,000 to 999,999
250,000 to 499,999
100,000 to 249,999
Population Change (1990-1998)
Color of Circle Represents Gain and Loss
Gain
Loss

Source: Population Estimates Program, U.S. Census Bureau

The westward movement is very obvious here. A strong Hispanic community immigration into the south of this region must also be mentioned.

## 1.3 Data Limitations

The data on the steel and concrete construction markets are not available. FW Dodge is the main supplier of such data. They have been analyzing 95% of the United States construction projects since 1967. The projects are, among other things, classified by *framing code* (steel, concrete, wood or other). However, in response to our official request, this company indicated to us that the quality of the figures regarding the framing code was not to be trusted because too large a number of projects is classified in the other category. The data are not reliable.

We therefore analyzed the data by sector: residential and non-residential.

Concerning the residential sector supply, in 1994, the *Bureau of Census* provided an accurate count of the housing inventory by building structure and metropolitan area for 1990, the date of the last census. However, the housing starts in the high-rise apartment buildings are part of a five-unit and over building group. Moreover, no distinction is made between rental housing and condominiums or divided co-ownership. Concerning the demand, there is no metropolitan breakdown of population data by age group or number and type of household. The last census dates back to 1990 and the next one takes place this year. Consequently, we have incorporated age group and household type only indirectly into our estimates of demand growth variables.

The focus of the empirical non-residential real estate research centred on the analysis of the office market. On the one hand, the information available on it is fairly detailed. In fact, we had a great deal of difficulty collecting the data for the other sectors and we had to adapt the basic model and the indicators of potential, especially for the shopping centre sector. On the other, the office building sector is highly revealing of a region's economic growth. With the tertiarization of the economy, these buildings house a region's economic base.

## 1.4 Methodology and Organization of the Report

### 1.4.1 Predictive Capability of a Regional Economic Growth Index

To evaluate a region's penetration potential, it would be useful to contemplate its long-term growth. A precursive index of the demand is usually composed of several weighted variables since no single variable can predict all the types of growth. National precursive growth indices do exist. However, their ability to predict cyclical changes at the local level is weak because the components and the weighting indices for these components are highly variable and subjective.

First, the choice of the variables depends on the availability of the data and these data are difficult to obtain at the local level. Second, variables specific to a local market, such as the change in the economic base, would greatly enhance the index's predictive capability. Third, a variable's volatility changes according to the location and a variable should not be weighted by the same factor in all locations. Actually, to evaluate a region's probability of growth, it would be necessary to obtain some temporal changes in an index for the region. Fourth, it would be unrealistic to conclude the same improvement if, for example, growth is identical in New York and Las Vegas.

Consequently, since our objective here was obviously not to develop a regional economic growth model, we have suggested some simple indicators for evaluating the demand by region and by sector. We did not change the variables or perform regression analyses. Even though the ranking of the regions according to anticipated growth is far from perfect, the exercise remains completely useful because it allows the builders to reflect on the issues associated with a penetration region.

### 1.4.2 Analysis of the Secondary Data

To succeed in the American market, a cautious attitude closely tailored to the local market is necessary. Given that this study is based, when all is said and done, on limited data regarding a region, the company that is contemplating a project in the United States will have to conduct in-depth research right in the anticipated market before coming to a penetration conclusion. The decision to invest must not be based only on this study. A thorough market analysis is a further necessity. The steps are the following:

**Overview of the region**: *Chapter II* examines the broad economic conditions in the United States. Generally speaking, economic growth fuels construction demand. However, the risks of surplus real properties differ not only according to the type of building but also according to the region. Chapter II therefore performs a broad analysis of the secondary data on the demand by region and type of building to derive some indicators of potential by type of building in a region (historic, demographic, economic base, general employment trends) and to make comparisons with other regions. The methodology used, however, is not flawless. We risk detecting an imbalance between the supply and the demand when one does not exist: we could, for example, overestimate the future demand, since the data are based on the *Bureau of Census* forecasts that are essentially founded on historic trends.

**Specific market analysis**: *Chapter III* performs a specific analysis of the regions with strong potential as qualified in Chapter II. At the outset, we examined the entry barriers you risk coming up against, with some suggestions for means to overcome them. Closer to the end of the chapter, we add a little refinement to the overview of the regions with good potential by presenting descriptive fact sheets on each of the regions. More specifically, we analyzed the secondary qualitative data concerning the local supply based on a review of specialized literature: entry barriers and regulations affecting production, analysis of the sub-markets and, when possible, identification of major projects underway,...

**Analysis of the absorption of the project contemplated:** The decision to invest will have to be preceded by a more thorough on-site analysis of the local market to know the geographic growth sectors and the projects in the supply pipeline, in order to understand the local authorities' modus operandi, to seize location opportunities or specific niches. This analysis must be performed by the company that is contemplating a project to penetrate a specific market in the United States. It is divided into three sections:

*Sub-market risk*: market segmentation and site desirability analysis; review of the indicators in the sub-market contemplated (new demand trends, growth or shrinkage expectations by the major employers in the sub-market); research on primary data on the filtering phenomenon and tenant movements: interviews with brokers, tenants, property managers

*Refinement of the project design*: differentiation from the projects in the supply pipeline, review of the lessons and experiences of comparable new projects to refine the contemplated design and marketing (mistakes made)

*Financial analysis and search for capital:* sensitivity of the project's profits to different local factors such as entry barriers, current perceived trends.

### 1.4.3 Case Studies of Current Exporters

Beyond this quantitative analysis, it is necessary to understand the conditions underlying the success of setting up in the American market. To improve the way of taking advantage of the enormous potential the American market represents, we have devoted a chapter to the current Canadian successes, their exemplary practices and technologies, the means of growth and the potential they are anticipating in the short and long term.

We conducted semi-directed interviews of ten current Canadian exporters. The account of their experiences will be able to guide you in making your decision. The review of their steps for taming the market, overcoming the entry barriers and promoting their competitive advantage seemed essential to us for imagining the future universe and knowing how to take advantage of it.

The choice of the exporters interviewed was based on how well they represented the regions/domains deemed as having strong potential.

# II-IDENTIFICATION OF HIGH-POTENTIAL MARKETS

We cannot examine the potential of metropolitan markets without first referring to an economic scenario providing the major economic trends and the financial indices (currency exchange, interest rates) for the United States as a whole. Table 2.1.1 summarizes the most recent primary economic and financial forecasts.

## 2.1 Reference Economic Scenario

In the past fifty years, we have never experienced such a long period of economic growth without inflation.

A year ago, the effects of the Asian crisis hit the west coast of North America and the rouble collapsed in Russia. At the time, the economists had predicted a decline in growth for the year 2000, as well as a slight drop in interest rates and depressed stock markets. Today, however, it is evident that they had underestimated the growth in American productivity and the ability of the emerging Asian nations to recover rapidly. In fact, in the past four years, since American productivity grew by 3.0% and the number of jobs created by 1.0%, the long-term growth rate of the economy, without inflation, is about 4.0%. This rate reflects the results obtained in the past four years. The growth in the real GDP was fuelled above all by domestic consumption, in spite of three consecutive interest rate hikes in 1999.

The savings rate at the end of 1999 fell to its lowest level, or 1.9%. "American households are heavily exposed to the stock market, according to a Federal Reserve report. In 1999, Americans held $13.3 trillion in shares, nearly 32% of household wealth, ten percentage points higher than in 1995."[2]

The American economy is experiencing a decline in its growth at the end of its longest upward economic cycle, which has lasted nine years.

### 2.1.1 Exchange Rate

We mention right away that the vigour of the Canadian dollar should benefit from the strengthening raw material prices (oil in particular) caused by the recovery of the global economy. The Canadian dollar is still perceived as a currency tied to the price of raw materials. Currency exchange forecasts made in March 2000 situate it at US$72.15 in 2001.

The global economy is in a recovery phase after two years of financial crises in Asia, Russia and Latin America. This gradual recovery is reflected in an acceleration of global economic growth that will settle at 3.6% in 2000. The United States contributed greatly to re-establishing this global economic growth by purchasing more imported goods and sustaining a decline in their export demand. The deterioration in the current account balance that resulted from this was readily financed by the massive influx of the capital seeking refuge in American stocks and bonds. This situation could, however, change rapidly.

The trade deficit reached a record level of 338.9 billion dollars in 1999, or 100 more than in 1998. The United States has the highest debt in the world. Therefore, the main risk showing up on the economic horizon of the United States is the deterioration in the current balance that could lead to a depreciation of the American dollar, a greater increase than expected in the long-term interest rates and a significant market correction. The stock market seems to be overvalued. However, we mention here that, as opposed to the traditional sectors, the internet securities do not depend on the cost of raw materials. Also, the global recovery would lead to capital returning to less costly markets.

Any deterioration in the stocks and bonds markets could shake the confidence of foreign investors and magnify the drop in the markets. In fact, currently, foreign investors hold 40% of all the American bonds, as compared with 20% five years ago. They might be tempted to liquidate part of them if they feel that the interest rates will rise and the American dollar will depreciate.

---

[2] The Economist, March 17th 2000.

### 2.1.2 Interest Rate

This global recovery also marks the end of the interest rate relaxation.

First, consumer spending, fuelled by wage growth and especially the appreciation of stock market securities, has supported the growth. The American domestic demand is not slowing sufficiently, which obliges the Federal Reserve to tighten credit aggressively to curb inflation. In the meantime, economic activity will gradually become less dependent on domestic demand and more on net exports because of the global economic recovery and the weaker dollar. However, this global economic recovery also promotes inflation through a gradual strengthening of the price of raw materials, including the rise in the price of oil.

Second, the dangers of an American inflation rate acceleration are also present, because full employment accelerates wage increases. Third, to re-establish the current balance, it will be necessary to raise the interest rates. The American stock market is expecting long-term interest rates to be held at under 6.25% and corporation profits to continue to grow at 15% per year. It is therefore vulnerable to any significant deviation in relation to these expectations.

Fiscal tightening in the United States is aimed at a new softer landing to bring the real GDP growth back to its potential non-inflationary rate of an estimated 3% per year. The interest rates for long-term bonds went from 4.7% in October 1998 to close to 6.70% in mid-January 2000. They will fluctuate at around 6.5% over the course of the next year. The slowing of the economic activity will ensue, encouraged also by the rise in the price of oil.

### 2.1.3 Productivity Gains and Job Creation

The acceleration in economic growth without inflation over the course of the past years would not have been possible without an improvement in productivity gains. They were propelled by a very competitive American economy, due to deregulation, market globalization and, above all, to the Internet that considerably reduced the costs of intermediation.

The productivity gains in the American economy, spawned by the implementation of new technologies, reveal a higher than expected growth potential that is extending the term of the current upward cycle. Moreover, the magic of productivity gains is there to stay. The American companies' massive investment in technology is evidence of their ability to preserve their profit margins without raising prices. Since the beginning of 1999, job creation has shown no sign of slowing since it is still above the average for the 90s.

The analysis must be qualified however. The 3.9% average annual growth rate of the real American GDP since 1996 would not be supportable in the long term. This pace of growth was made possible by the creation of jobs and by a reduction in the unemployment rate, which was situated at 4.2% in August 1999, a floor, the lowest level since 1969. The American economy will not be able to support this pace without some upward pressures appearing on wages, as the acceleration in the annual rate of wage increases confirms.

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**Table 2.1.1- Economists' Forecasts for the Years 2000 and 2001 (to be revised on June 30)**

**Economic and Financial Indicators in the United States and Canada – Annual averages**

| | 1999 | 2000 | 2001 |
|---|---|---|---|
| *Growth in Real GDP* | | | |
| Canada | 4.2% | 4.1% | 3.1% |
| United States | 4.1% | 4.4% | 2.8% |
| *Unemployment Rate* | | | |
| Canada | 7.6% | 6.6% | 6.3% |
| United States | 4.2% | 4.1% | 4.4% |
| *Growth in Consumer Price Index* | | | |
| Canada | 1.7% | 2.4% | 2.2% |
| United States | 2.2% | 2.9% | 2.6% |
| *Savings Rate* | | | |
| Canada | 1.4% | 1.2% | 1.4% |
| United States | 2.3% | 1.8% | 2.5% |
| *Rates for 3-month Treasury Bonds* | | | |
| Canada | 4.81% | 5.40% | 5.20% |
| United States | 5.31% | 6.55% | 6.35% |
| *Rates for 10-year Government Bonds* | | | |
| Canada | 5.55% | 6.35% | 6.20% |
| United States | 5.63% | 6.50% | 6.20% |
| *Housing Starts (in 000 housing units)* | | | |
| Canada | 150 | 160 | 165 |
| United States | 1,674 | 1,608 | 1,670 |
| *Exchange Rate* | 67.33 | 69.10 | 72.15 |

Source: TD Quarterly Economic Forecast, TD Economics, March 30, 2000

## 2.2 The Economic Climate and the Real Estate Markets

### 2.2.1 Considerations on the Synchronization of the Economic and Real Estates Cycles

An investment in the United States must not be contemplated as a diversification of operations but rather as an expansion of operations. In fact, the construction cycles follow each other in the North American markets. However, these cycles can differ somewhat in severity and synchronization. Moreover, the size of the American metropolitan real estate markets is much greater than that of the Canadian markets.

Generally speaking, economic growth fuels the construction demand. Five economic recessions have occurred since 1967: demand then was in decline. The supply is estimated by the level (in square feet or housing units) of construction. The equilibrium between the supply and the demand is generally indicated by the vacancy rate and by the rent.

However, we will see in the global review of each of these sectors, that the risks of surplus buildings differ not only according to the type of buildings but also according to the region.[3] Hence, in Table 2.2.1, we reproduce, for each type of building and region, the relation observed in prior years between the new supply and job growth.[4] On the one hand, the American averages indicate the low correlation between the supply of office space and the economic climate. On the other, the lower correlation for certain regions reflects the constraints on expressing the supply in these regions. For example, we could rightly expect low correlations for office spaces in New York and San Francisco. Generally speaking, the higher the correlation for all types of buildings, the greater the availability of land and the ease in obtaining permits. The lower the correlation, the greater the volatility of the supply and the larger the risk of imbalance between the supply and demand. The compensation for real estate risk also differs according to the regions. We end with Table 2.2.2 providing the performance index by type of building and large region.

The real estate markets are still highly influenced by the private builders. In spite of the growth in Real Estate Investment Trusts (REITs), construction financing is still very local. However, lenders' caution, sounder loan management through information technologies and mortgage financing innovations have reduced the volatility of the markets and the severity of the recessions. "The monopolistic competition dimension that derives from **location** remains unchanged."[5] In other words, a review of the opportunities on the American market must take into account the unique dimensions and organization of the specific supply in the local market.

### 2.2.2 The 1999 Real Estate Markets

The real estate markets reached equilibrium. And the rents rose in all sectors. The construction of residential and non-residential buildings performed well in the first half of 1999, but the second half of 1999 was rather disappointing. Since January 2000, the construction volume has been restored. "Construction activity in 2000 should be supported by continued strength for both public works and institutional building, but what remains to be seen is the impact that higher interest rates will ultimately have on housing and commercial building."[6]

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[3] Wheaton, William, January 1998, *Real Estate Cycles: Some Fundamentals*, MIT Center for Real Estate, January 1998.

[4] CB Richard Ellis Investment Properties, 1999, *Real Estate Cycles & Outlook*, p. 18

[5] Wheaton, William, January 1998, *Real Estate Cycles: Some Fundamentals*, MIT Center for Real Estate.

[6] The quotes in this section come from various press releases by F.W. Dodge Division of McGraw-Hill.

**Table 2.2.1- Correlation between Supply and Demand (estimated by job growth)**

| | Offices | Multiples | Retail | Industrial | Average |
|---|---|---|---|---|---|
| Baltimore | 0.358 | 0.637 | 0.543 | 0.412 | 0.488 |
| Houston | 0.531 | 0.402 | 0.351 | 0.530 | 0.454 |
| Oakland | 0.101 | 0.512 | 0.565 | 0.408 | 0.397 |
| Orange County | 0.603 | 0.802 | 0.097 | 0.811 | 0.578 |
| Tampa | 0.563 | 0.615 | -0.128 | 0.486 | 0.384 |
| Washington | 0.546 | 0.573 | 0.429 | 0.672 | 0.555 |
| Orlando | 0.485 | 0.148 | 0.429 | 0.598 | 0.415 |
| Denver | 0.460 | 0.225 | -0.017 | 0.674 | 0.336 |
| Dallas | 0.408 | 0.464 | 0.633 | 0.621 | 0.532 |
| Phoenix | 0.402 | 0.647 | 0.398 | 0.471 | 0.480 |
| Atlanta | 0.305 | 0.426 | 0.440 | 0.594 | 0.441 |
| Seattle | 0.330 | 0.835 | 0.097 | 0.663 | 0.481 |
| San Diego | 0.344 | 0.822 | 0.501 | 0.711 | 0.595 |
| Philadelphia | 0.363 | 0.598 | 0.132 | 0.107 | 0.300 |
| Miami | 0.381 | 0.478 | -0.279 | 0.531 | 0.278 |
| Los Angeles | 0.265 | 0.568 | 0.490 | 0.698 | 0.505 |
| Las Vegas | 0.184 | 0.453 | 0.437 | 0.445 | 0.380 |
| Boston | 0.200 | 0.472 | -0.051 | 0.372 | 0.248 |
| Chicago | 0.163 | 0.355 | 0.504 | 0.114 | 0.284 |
| Kansas City | 0.210 | 0.351 | 0.361 | 0.130 | 0.263 |
| Minneapolis | 0.173 | 0.296 | -0.124 | 0.408 | 0.188 |
| Cleveland | 0.116 | 0.611 | 0.372 | 0.245 | 0.336 |
| Sacramento | 0.084 | 0.614 | 0.363 | 0.210 | 0.318 |
| Detroit | 0.048 | 0.394 | 0.126 | 0.288 | 0.214 |
| St. Louis | 0.035 | 0.472 | 0.326 | 0.249 | 0.271 |
| San Jose | 0.456 | 0.304 | -0.012 | 0.376 | 0.281 |
| San Francisco | -0.012 | 0.354 | 0.132 | 0.153 | 0.157 |
| Indianapolis | -0.025 | 0.241 | 0.230 | 0.361 | 0.202 |
| New York | -0.016 | 0.624 | NA | NA | NA |
| American Average | 0.277 | 0.475 | 0.245 | 0.446 | NA |

Source: CB Richard Ellis Investment Properties, 1999, *Real Estate Cycles & Outlook*, p.18

Table 2.2.2- Increase in the *Quarterly* Total Return Index for Existing Buildings by Major Region and Type of Building

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| East | | | | | National | | | | |
| 1994 | 1.19 | 1.54 | 1.04 | 1.78 | 1994 | 1.31 | 1.54 | 1.51 | 1.88 |
| 1995 | 1.63 | 2.36 | 2.11 | 0.88 | 1995 | 2.11 | 2.08 | 2.06 | 1.09 |
| 1996 | 2.48 | 2.34 | 2.95 | 2 | 1996 | 2.4 | 2.29 | 2.63 | 2.61 |
| 1997 | 2.2 | 2.6 | 3.53 | 5.26 | 1997 | 2.34 | 2.82 | 3.38 | 4.71 |
| 1998 | 4.25 | 3.69 | 3.46 | 3.76 | 1998 | 4.14 | 4.2 | 3.43 | 3.58 |
| 1999 | 2.84 | 2.48 | 3.12 | 3.11 | 1999 | 2.58 | 2.56 | 2.77 | 2.76 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Midwest | | | | | West | | | | |
| 1994 | 1.69 | 1.87 | 1.91 | 1.46 | 1994 | 1.01 | 1.22 | 1.23 | 2.09 |
| 1995 | 2.17 | 1.72 | 1.83 | 0.33 | 1995 | 2.34 | 2.22 | 2.29 | 1.72 |
| 1996 | 1.86 | 1.9 | 2.08 | 1.95 | 1996 | 2.7 | 2.62 | 3.04 | 3.88 |
| 1997 | 2.47 | 2.59 | 3.06 | 3.59 | 1997 | 2.9 | 3.57 | 3.77 | 5.12 |
| 1998 | 3.27 | 2.76 | 3.26 | 3.58 | 1998 | 4.47 | 5.53 | 3.44 | 3.66 |
| 1999 | 1.97 | 2.57 | 3.14 | 2.35 | 1999 | 2.7 | 2.85 | 2.65 | 3.03 |

| | | | | |
|---|---|---|---|---|
| South | | | | |
| 1994 | 1.62 | 1.74 | 2.24 | 2.11 |
| 1995 | 2.36 | 1.83 | 1.87 | 1.12 |
| 1996 | 2.33 | 2.12 | 2.13 | 2.23 |
| 1997 | 1.6 | 2.27 | 2.94 | 4.29 |
| 1998 | 4.13 | 3.95 | 3.52 | 3.23 |
| 1999 | 2.48 | 2.25 | 2.24 | 2.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Apartments | | | | | Offices | | | | |
| 1994 | 2.48 | 2.6 | 2.46 | 4.03 | 1994 | 0.91 | 1.56 | 0.31 | 1.09 |
| 1995 | 2.49 | 2.66 | 2.63 | 3.41 | 1995 | 1.91 | 1.98 | 2.17 | 0.94 |
| 1996 | 2.68 | 2.85 | 2.63 | 2.91 | 1996 | 2.67 | 2.74 | 2.57 | 4.96 |
| 1997 | 2.28 | 2.91 | 3.29 | 3.85 | 1997 | 3.04 | 3.36 | 3.87 | 6.56 |
| 1998 | 3.29 | 3.25 | 3.51 | 3.25 | 1998 | 5.5 | 4.87 | 3.81 | 4.18 |
| 1999 | 2.79 | 2.55 | 2.72 | 3.18 | 1999 | 2.79 | 2.72 | 3.16 | 2.74 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Industrial | | | | | Commercial | | | | |
| 1994 | 1.5 | 1.25 | 2.26 | 2.41 | 1994 | 1.08 | 1.27 | 2.08 | 1.45 |
| 1995 | 3.05 | 3.03 | 2.93 | 2.76 | 1995 | 1.75 | 1.46 | 1.32 | -0.58 |
| 1996 | 3.17 | 2.69 | 3.74 | 3.33 | 1996 | 1.68 | 1.32 | 1.74 | 0.04 |
| 1997 | 3.12 | 3.68 | 4.41 | 3.86 | 1997 | 1.24 | 1.64 | 2.33 | 3.07 |
| 1998 | 3.71 | 4.63 | 3.7 | 2.97 | 1998 | 2.92 | 3.52 | 2.62 | 3.28 |
| 1999 | 2.54 | 2.78 | 3.05 | 2.93 | 1999 | 2.79 | 2.72 | 3.16 | 2.74 |

Source: The National Council of Real Estate Investment Fiduciaries (NCREIF)

Note: The total return measures the capital gain and current return.

According to a survey conducted on 900 presidents of construction companies, 59% are expecting to maintain the same construction level in 2000 as in 1999.[7] The construction industry is confident that growth will continue, but at a slower pace. The main obstacle is due to the shortage of high-quality labour, which increases the costs and building delays, while decreasing quality. They also expect, quite rightly moreover, that financing costs will increase.

Close to half indicate that *residential construction* offers the best growth opportunity. Of course, the single-family housing reigns the market. Furthermore, the growth in rents and apartment prices is perhaps coming to an end. However, the balance between supply and demand continues to hold investor interest. In addition, the increase in interest rates reduces single ownership accessibility and increases the demand for rental housing. "To this point, strong income growth and high levels of consumer confidence have helped to keep homebuyer demand strong, even with the moderate increase in mortgage rates. Still, the odds favour some softening of both demand and housing construction in the coming months." In the longer term, we note that the growth in ethnic diversity and the population's aging will contribute to the expansion of the multi-family building. A few supplementary supply pockets are visible but we note primarily a return to the city and the conversion of industrial buildings into residential buildings to satisfy this demand. The aggregate supply grew by 8% in 1999. We note some very large building projects in, among others, San Diego ($59M) and Chicago ($50M).

Generally speaking, the *office building* supply is healthy and in harmony with demand. However, even though it decreased by 3% in 1999, construction is outstripping absorption by an average of 20%. The new demand is generated by some industry niches emerging from outsourcing, electronic commerce, Internet services. For example, Charlotte is benefiting from this new economy. A $65 million project is anticipated there.

Consumer spending has encouraged retail sales and the builders are once again busy in this sector, especially in the existing *shopping centres* that are being renovated and expanded. The supply rose by 4% in 1999, primarily because of entertainment projects including theatres, arenas and other amenities, etc. "Store construction during 1999 climbed to an all-time high, boosted by a greater amount of large entertainment-based retail and outlet centre projects. A reduced pace for store construction is likely to occur in 2000, yet the healthy amount witnessed at the start of this year suggests that the downturn may not be too severe."

The industrial and hotel sectors are the least healthy. Hotel construction contracts dropped 10% in 1999. However, "Hotel construction jumped 34 percent in January, helped by a $65 million project in southern Florida and a $44 million project in Cleveland."

### 2.2.3 Definition of the Selected Indicators of Potential

As mentioned in the analysis proposal, among the indicators of potential we note the region's physical accessibility and size. To evaluate the relative potential of the markets in more detail, we selected four broad indicators:

*Market depth*: the market should be large enough to reduce an individual builder's absorption risks. The depth is evaluated by the number of residential building permits for five or more units, the number of square feet built in the office and retail sectors and the number of hotel rooms built.

*Activity intensity* in relation to population: This index allows comparing the markets with each other. Generally speaking, the most active markets with the strongest growth will have a higher construction per capita ratio.

*Demand/supply equilibrium* in each of the markets. This equilibrium is estimated by the following ratio:

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[7] CIT Group, 1999, *Construction Industry Forecast.*

E = (demand growth/total demand)/(supply growth/total supply)
The demand will be estimated by the most determinant variable in the sector under review. If E is greater than one, demand is likely to exceed supply and this market is profitable for the investor. In cases where E is less than one, the investment risks are higher. The vacancy rate is also integrated into this indicator. Consequently, if E is less than 1 in a region where the vacancy rate is high, we can conclude large market risks.

*Probability of market growth* in the next five years. This probability is based on the following ratio:
P = demand projection / supply projection
If P is greater than one, the projected demand exceeds the projected supply and there is room for construction, especially in the markets that post a surplus demand in terms of the equilibrium index. In the cases where P is less than one, the projected supply is in excess.

These indicators for each of the four sectors under study are shown in Table 2.2.3. The methodology for estimating the demand in each of the sectors is indicated under the heading of the sector involved in the lines that follow.

**Table 2.2.3-Performance Indicators by Sector**

|  | Multiples | Offices | Shopping Centres | Hotels |
|---|---|---|---|---|
| Activity 97-98-99 | Number of permits (5 units and over)<br>Number of permits per building and Proportion multi/total | Construction in square feet | Construction in square feet | Number of rooms built |
| Intensity of the activity (97-98-99) | Number of permits (5 units and over) per 10,000 persons | Number of square feet built per 1,000 persons and growth<br>Construction / Inventory | Rental space per capita (1997 only)<br>Construction/Inventory | Number of rooms built per 1,000 persons<br>Construction/Inventory |
| Market equilibrium (E) 1998-99 | Annual population growth in % / (Permits (5 units and over) over Inventory (5 units and over))<br>Annual job growth in % / (permits (5 units and over) over Inventory (5 units and over))<br>Vacancy rate and Variation in vacancy rate | Absorption/(construction + vacancy)<br>Vacancy rate | Rental space demand per capita/Rental space supply per capita (in 1997 only)<br>Vacancy rate and rents by market segment | (Variation in number of bednights over total bednights) / (Construction over Inventory)<br>REVPAR and REVPAR variation (see Section 2.6) |
| Market growth 2000-2005 | Projected demand /projected supply (see methodology in Section 2.3) | Projected demand /projected supply (see methodology in Section 2.4) | Total residential growth | Growth in office space demand |

## 2.3 Metropolitan Market Ranking in the Multiple Housing Sector

### 2.3.1 Current American Trends

We have already mentioned that the single-family home reigns this market. However, if the multiple housing segment is a low proportion of construction, it is important in absolute value. It reaches 340,000 units per year. Furthermore, the construction of such buildings is concentrated in certain areas such as New York and Denver.

As shown in Table 2.2.1, the multiple housing and industrial sectors follow the economic climate or the demand quite closely. The empirical studies have shown that the supply time lag in relation to demand does not exceed one year. Inventory growth has been from 1 to 3% annually. The relative stability of the vacancy rate and real rents also reflects this synchronization. Consequently, the risk in this sector is basically an economic climate risk related to demand and not to supply. The literature review shows that the best multiples construction indicators are population growth and total employment growth.[8] On the employment side, even though a reduction is expected in demand growth as a result of the economic downturn, the housing demand still exceeds the supply. The changes in the demographic profile also have a marked effect on the demand for multiple housing.

The *Bureau of Census* has made very sophisticated total American population forecasts up to 2010. These forecasts are favourable for a large increase in the demand for multiple housing in the coming years. We are informing you of this so that, in the detailed examination of the region where you want to establish yourself, you are sensitive to the key demand variables. Table 2.3.1 summarizes our statements.

The changes in the composition of households in multiples are fairly similar to the changes in all households. The 1997 tenant is slightly older than the one in 1987 and the size of the household has increased slightly. The predominant factor is the proportion of childless households and especially single persons who make up nearly 50% of the demand (Table 2.3.1A). As it stands, the entire household growth by 2005 and 2010 will stem from couples without children and single persons.

In tables 2.3.1B and 2.3.1C, we recognize the growth in the following population groups:
.Increase in the age 65 and over and in single persons
.Increase in the under 30 and single persons who are very mobile
.Phenomenal increase in the 45-64 age group and childless family households
The growth in the 45-64 age group will decisively fuel the demand for multiple housing. In particular, if they change their current preferences and opt for multiple housing, their anticipated demand could grow from 187,000 to 360,000 units per year.

As it stands, a significant portion of the baby boomers would choose a more urban lifestyle. These households want to be closer to the workplace, culture, amenities, and the environmental factors conducive to children, such as school quality, are assuming less and less importance. We are already seeing signs of a return to the city after many decades of decline. "The new, more affluent lifestyle renter is growing in number and is demanding a higher quality of life that encompasses more housing choices, better design and finish out, more space, amenities, aesthetic surroundings, new technology, on-site services, higher security, and more of a home-type setting complete with private entry garage."[9]

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[8] Born, Waldo, October 1988, *A Real Estate Market Research Method to Screen Areas for New Construction Potential*. Journal of Real Estate Research, Volume 3, No. 3.

[9] Carter & Burgess Inc., *Development in a Hot Market.*

|  | All households |  | Households in 5+ multiples |  |
|---|---|---|---|---|
|  | *1987* | *1997* | *1987* | *1997* |
| Median age | 45 | 46 | 36 | 37 |
| Average age | 48 | 48 | 43 | 43 |
| % <30 years | 16 | 14 | 33 | 30 |
| % 65 and over | 21 | 20 | 18 | 16 |
| % single persons | 24 | 25 | 48 | 46 |

Source: U.S. Bureau of the Census (1997a, 1997b).

Table 2.3.1B- Population Projections by Age Group (in thousands)

|  | *Total* | *Under 18 years* | *18-34* | *35-44* | *45-64* | *65 and over* |
|---|---|---|---|---|---|---|
| 1995 | 262,820 | 68,743 | 65,789 | 42,514 | 52,231 | 33,543 |
| 2000 | 274,634 | 70,783 | 63,491 | 44,659 | 60,992 | 34,709 |
| 2005 | 285,981 | 71,963 | 64,574 | 42,165 | 71,113 | 36,166 |
| 2010 | 297,716 | 72,509 | 68,430 | 38,521 | 78,848 | 39,408 |
| 2020 | 322,742 | 77,603 | 72,853 | 39,612 | 79,454 | 53,220 |
| Growth 2000-2005 | 11,347 | 1,180 | 1,083 | -2,494 | 10,121 | 1,457 |
| Growth 2005-2010 | 11,735 | 546 | 3,856 | -3,644 | 7,735 | 3,242 |

Source: U.S. Bureau of the Census, Current Population Reports P25-1130

Table 2.3.1C- Household Projections by Type (in thousands)

|  | *1995* | *2000* | *2005* | *2010* | *2000-2005* |
|---|---|---|---|---|---|
| Total | 97.7 | 103.2 | 108.8 | 114.8 | 5.6 |
| Family | 68.4 | 71.7 | 74.7 | 77.9 | 3 |
| With children | 32.6 | 33.1 | 32.7 | 32.2 | -0.4 |
| Without children | 35.8 | 38.6 | 42 | 45.7 | 3.4 |
| Non-family | 29.3 | 31.6 | 34.1 | 36.9 | 2.5 |
| Single persons | 24.3 | 26.2 | 28.3 | 30.7 | 2.1 |

Source: U.S. Bureau of the Census, Current Population Reports P25-1130

Table 2.3.1D – Household Projections by Headship Age Group (as a % of annual growth)

|  | All households |  | Households in 5+ multi |  |
|---|---|---|---|---|
|  | *2000-2005* | *2005-2010* | *2000-2005* | *2005-2010* |
| Total | 1.1 | 1.1 | 1.1 | 1.2 |
| Under 30 years | 3.1 | 1.6 | 2.4 | 3.3 |
| 30-44 years | 3.3 | 2.2 | -1.5 | -0.5 |
| 45-64 | 6.7 | 4.6 | 7.6 | 5.6 |
| 65 and over | 2.1 | 0.9 | 1.3 | 2.9 |

Table 2.3.1E – Characteristics of the 5 and over Multiple Housing Market Segments (1997)

|  | *Affordable* | *Average* | *Luxury* | *Total* |
|---|---|---|---|---|
| % households | 49 | 37 | 14 | 100 |
| *Age* |  |  |  |  |
| Median | 41 | 33 | 38 | 37 |
| Average | 47 | 38 | 42 | 43 |
| % - 30 years | 26 | 39 | 20 | 30 |
| % 65 and + | 23 | 8 | 10 | 16 |
| *Household size* |  |  |  |  |
| Average | 2.1 | 2.2 | 1.4 | 2 |
| % single person | 50 | 31 | 65 | 46 |
| *Income ($)* |  |  |  |  |
| Average | 11,795 | 42,752 | 62,382 | 29,603 |
| Median | 10,444 | 32,100 | 48,928 | 21,000 |

Source: U.S. Bureau of the Census

The trend towards returning to the city is being encouraged by the authorities who are concerned about the cost of urban sprawl and are taking concrete densification action. The two most significant constraints on this trend are: the opposition by the resident community in which the project is taking place and the difficulty in assembling the land. The total production of multiple housing has been rising substantially since 1993. It went from 124,800 units in 1993 to 247,100 units in 1997, 303,000 in 1998 and 342,000 in 1999. Several large enterprises are seeking locations with strong entry barriers to reduce the risk of surplus supply.

Growth in the 65 and over group is also fuelling the demand. "The nation's population of senior citizens - people in the 75-plus age range - is slowly but surely outstripping the building industry's ability to house them. In 1997 some 45,000 new senior housing units were added in the United States, in 1998 about 50,000 and in 1999 about 65,000. Combined, these three years of strong development increased the senior housing inventory by approximately 7.9 percent, but the national senior population grew at a rate of 8.5 percent during the same time."[10] They are heading for the southeast, towards North Carolina, Georgia, Virginia, rather than Florida, which, according to many of them, has too much grey hair. Sixty percent are heading for small cities, such as Asheville and Hendersonville in North Carolina. Those 50 years and over are planning second homes that will become their retirement homes and this market is growing. We note that 7% of the properties and condominiums in Florida belong to vacationers.

We also note that in the demand projection there is little distinction made between rental housing and undivided or divided condominium housing. Yet, for the luxury housing segment this distinction seems important to us. More than 10% of the multiples in the United States is in condominiums. However, production has stayed at around 35,000 units since 1991, or 15% of the annual multiples production: it declined considerably in the 80s, slipping from 143,600 units in 1984 to 35,300 in 1991.

### 2.3.2 Performance Indicators and Benchmarks

In 1994, the *Bureau of Census* provided an accurate count of the housing inventory by building structure and metropolitan area for census year 1990. The inventory is therefore accurately measured every ten years and during the decade it is very difficult to estimate the inventory losses caused by demolitions and conversions. To estimate the current housing inventory in the structures of five units and more, we simply applied their proportion published in 1994 (I) to the total inventory indicated by *U.S. Housing Markets* for 1999.[11] The following lines present the benchmarks for the indicators selected in the residential domain.

***Activity and Intensity***

*Permits*: More than 2,800 units must be built per year in the buildings with five units and more. Below this benchmark, the contractor risks erecting a building that will flood the market.

*Density*: We built a density indicator to select the regions with high-rise buildings by multiplying the average number of units per building and the average proportion of construction in buildings with five units and more. As a general rule, the regions had to show a score higher than three.

*Intensity*: We divided the average number of units allowed per 10,000 inhabitants in 1999. The regions had to show a ratio higher than 21.

The regions that did not meet two of these three benchmarks were rejected. A certain intensity is necessary to ensure the community's acceptance of the density. Density acceptance in a market is required for good project absorption. However, this criterion was not to result in eliminating certain new growing cities.

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[10] Marcus & Millichap, 1999, *Mid-Year Update Report*, National Apartment Market.

[11] *U.S. Housing Markets*, 1999, The Builder Magazine.

Moreover, it is important to be cautious in examining the permits per 10,000 inhabitants because the important activity in the south, which corners two-thirds of the multiples permits, is attributable to reconstruction due to problems caused by the hurricanes. This is why we based our projection on the average number of permits granted in the past three years.

### *Current equilibrium*

*Relative population growth*: The "Cp" index measures the strength of the demand attributable to recent population growth in relation to supply strength.

$$Cp = \frac{\text{Population growth}}{\text{Number of permits/Inventory}} * \text{(I) Proportion of the inventory in buildings with 5\&+}$$

We weighted the demand/supply ratio by the proportion of housing in multiples, because the probability of this type of building capturing the population growth is weak in low density regions. This index had to be higher than 20%.

*Relative job growth*: The "Ce" index measures the strength of the demand attributable recent job growth in relation to supply strength. This index had to be higher than 20%.

$$Ce = \frac{\text{Job growth}}{\text{Number of permits/Inventory}} * \text{(I) Proportion of the inventory in buildings with 5 and +}$$

*Vacancy rate*: This had to be lower than 8.5%. We mention that the best indicator of the supply/demand equilibrium is still the vacancy rate.

The regions that did not meet two of these three benchmarks were rejected. We note here that the south and west dominated apartment construction in the United States in the last decade: Las Vegas, Orlando, Dallas, Atlanta, Los Angeles, Houston emerge as the winners in this respect. We also note a greater risk of supply surplus.

The upward pressure on rents is usually not felt unless the vacancy rate is under 5%. In fact, a market's average rent is closely related to the mortgage payment for a first home. In the growing markets and in periods of interest rate hikes, the mortgage payment is likely to rise, and then the rent. At the end of the upward cycle, the rent risks declining.

Growth in rents is certainly symptomatic of a supply to demand deficit. However, in certain regions, this deficit is the result of such large constraints on new construction that it becomes very risky and costly to bank on and venture into these markets: as examples we mention San Francisco, Boston, Washington DC, Oakland, New York and Chicago.

### *The regions not selected*

Table 2.3.2 shows the regions rejected under the activity and equilibrium criteria. The second part indicates the regions rejected because of an overabundant supply: the vacancy rate there is very high. The third part shows the regions with weak growth.

### *Analysis of the other regions*

In the appendix, we have broken down the major metropolitan municipalities into smaller metropolitan areas. The metropolitan areas selected are shown in Table 2.3.3. They are ranked by population.

*Activity:* For the moment, we have continued to keep the strong growth areas of Boston and Norfolk but, over 1997-1999 they built less than 2,800 units in buildings with five and more units.

*Intensity:* The average number of units allowed per 10,000 inhabitants showed a ratio higher than 21. According to this criterion, we should have eliminated the large areas of Boston, Chicago, Los Angeles, New York, San Francisco (except San José) and Washington. In fact, it is in these areas that not enough land is available, that construction constraints are high and that the level of construction is low. Nevertheless, we kept: Boston, New York, Chicago and Washington because of their physical and cultural proximity to the Canadian market.

*Equilibrium:* The vacancy rate has not risen to a level above 7% in the past year. According to this criterion, Dallas and Baltimore were eliminated. On the other hand, Fort Lauderdale remains a hot destination and we elected to keep it for more thorough analysis.

## *Forecasts 2005*

### *Future demand*

As mentioned, there is no metropolitan population data breakdown by age group and household type, which limited the predictive capability of the indicators for future demand.

Furthermore, the changes in the demand are difficult to forecast because of the unpredictable population movements. In weak migration markets, the demographic methods used by the *Bureau of Census* are fairly reliable. The risk of imbalance between supply and demand is low and a smaller return on investment is thus acceptable there. But in the high migration regions, investment requires a much greater risk premium. For example, the cutbacks in the Defence budget have decimated the aerospace industry in southern California, while the growth in computer use was a source of immigration into Texas. The creation of new jobs is therefore an attraction factor for a region. The strategic factors that have a long-term impact on the market are, however, difficult to predict.

In view of these difficulties, we collected data on the quality of life and on the business environment in the regions. These qualitative data will enable us to weight our judgement on the regions with strong potential in the next chapter.

We estimated the demand growth by "Dr":
$Dr = Er*I/(E/M)*40\%+Mr*P*60\%$
where:
"Er" is the job growth forecast by the *Bureau of Census* between 2000 and 2005
"I" is the proportion of the housing inventory in buildings with five and more units
"E" is the current level of civilian jobs
"M" is the number of actual households as estimated in relation to the current population and by CACI[12]
"Mr" is household growth as estimated in relation to population growth (forecast by the *Bureau of Census*) and the number of persons per household forecast by CACI
"P" is the proportion of 97-98-99 permits for buildings of five units and more

### *Future supply*

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[12] US Marketing Systems Group of CACI International Inc.

The supply depends on the builders' expectations and also the economic conditions. Generally speaking, we have seen that changes in the supply are very gradual, so much so that the level of construction for the next five years is probably very close to the current level, a reflection of the fact that supply reacts quite slowly to demand.

According to Dun & Bradstreet, the construction industry is slowing its pace as this millennium begins. In 2000, total construction should decline according to the expectations of 200 building companies. The increase in mortgage rates delays the purchase of the first home, in spite of a record consumer confidence index and employment level. However, the fundamental economic health factors for the multiple housing sector are still present. In almost all the markets, the vacancy rates remain low, the growth in rents and values is higher than the inflation rate, and there is no supply surplus.

Consequently, little impact is expected on the multiples market. In fact, the stronger than expected rental demand caused by the purchase delay ensures a market rent higher than the economic construction and operating rent. The uncertainty regarding the supply level is above all due to the labour shortage and the upward pressures on real wages. We have therefore forecast maintaining the current level of construction for the next five years.

*Supply/demand equilibrium*

In Table 2.3.4, we have examined the demand and supply growth anticipated in each of these regions. The most interesting growth regions in the next five years are: Chicago, New York, Washington, Seattle, San Diego, Miami and Austin.

We have selected 18 regions to examine more closely in the next chapter. Ten of them, selected for the non-residential categories, belong to the EASTERN geographic zone, eight belong to the WESTERN zone.

EASTERN: New York, New Jersey, Chicago, Washington, Baltimore, Boston, Miami-Fort Lauderdale, Columbus, Charlotte. We kept Boston even if the number of multiples units did not meet the benchmark, because this city and its culture are very similar to Montreal and the builders always consider it first.

REMAINDER: San José, Fort Worth, Seattle, Minneapolis, Denver, Portland, San Diego, Austin.

| Criterion evaluated | Permits, density and intensity | | | Equilibrium: Relative growth of demand/supply | | | | |
|---|---|---|---|---|---|---|---|---|
| Variable selected | Multi units allowed | Density | Units/10,000 persons | Population Cp | Jobs Ce | Vacancy rate 1999 | 1998 | 99-98 |
| Elimination benchmark | Less than 2,800 | Less than 3 | Less than 21 | Less than 20% | Less than 20% | Over 8.5% | | Over 10% |
| **1- Eliminated in all respects** | | | | | | | | |
| Buffalo-Niagara Falls (MSA) | *865* | 4.88 | *7.07* | NA | NA | *14.90%* | 16.80% | -11.31% |
| Cincinnati-Hamilton (CMSA) | *2,774* | *2.13* | *14.1* | *8.19%* | 20.78% | *11.90%* | 11.50% | 3.48% |
| Cleveland-Akron (CMSA) | *1,493* | *1.63* | *5.13* | *-2.73%* | *19.36%* | *11.30%* | 10.30% | 9.71% |
| Detroit-Ann Arbor-Flint (CMSA) | 4,068 | *2.04* | *9.08* | *3.93%* | *13.46%* | *8.50%* | 7.40% | *14.86%* |
| Grand Rapids-Muskegon-Holland (MSA) | *1,346* | *2.73* | *12.81* | *4.99%* | *14.05%* | 7.30% | 6.20% | *17.74%* |
| Greensboro-Winston-Salem-High Point (MSA) | *2,435* | 3.14 | *20.54* | *5.19%* | *3.65%* | *8.70%* | 6.30% | *38.10%* |
| Greenville-Spartanburg-Anderson (MSA) | *797* | *1.90* | *8.54* | *8.06%* | *16.68%* | *10.30%* | 13.40% | -23.13% |
| Indianapolis (MSA) | *2,328* | *2.05* | *15.13* | *11.44%* | *13.05%* | *13.30%* | 10.50% | *26.67%* |
| Jacksonville (MSA) | *2,138* | 3.38 | *20.07* | *11.13%* | 23.87% | 7.10% | 6.80% | 4.41% |
| Kansas City (MSA) | 3,076 | 3.34 | *17.45* | *8.63%* | *6.05%* | 6.70% | 7.50% | -10.67% |
| Milwaukee-Racine (CMSA) | *2655* | 4.68 | *16.12* | *0.43%* | *9.07%* | 6.50% | 8.90% | -26.97% |
| Nashville (MSA) | *2,213* | *2.86* | *18.73* | *15.72%* | *14.17%* | 4.40% | 5.40% | -18.52% |
| New Orleans (MSA) | *659* | 3.45 | *5.03* | *2.33%* | *-9.50%* | *16.30%* | 12.30% | *32.52%* |
| Oklahoma City (MSA) | *1,441* | 3.40 | *13.74* | *6.91%* | 22.81% | *14.90%* | 12.20% | *22.13%* |
| Omaha (MSA) | *1,760* | 7.89 | 25.07 | *6.38%* | *-8.91%* | *9.00%* | 7.90% | *13.92%* |
| Pittsburgh (MSA) | *1,408* | 3.08 | *6.05* | *-7.16%* | *12.03%* | *12.50%* | 10.40% | *20.19%* |
| Philadelphia-Wilmington-Atlantic City (CMSA) | 2,968 | *2.69* | *5.99* | *2.43%* | 21.30% | *10.80%* | 10.30% | 4.85% |
| Richmond-Petersburg (MSA) | *1,298* | *2.18* | *13.46* | *10.89%* | 34.20% | *11.00%* | 5.20% | *111.54%* |
| Sacramento-Yolo (CMSA) | *2,647* | *2.62* | *15.35* | *15.94%* | 25.62% | 6.20% | 4.90% | *26.53%* |
| Salt Lake City-Ogden (MSA) | *1,839* | *2.83* | *14.26* | *9.30%* | *13.77%* | *8.50%* | 6.40% | *32.81%* |
| San Antonio (MSA) | *2,621* | 3.69 | *16.60* | *18.97%* | 28.12% | 6.80% | 6.60% | 3.03% |
| St. Louis (MSA) | *1,254* | *1.44* | *4.88* | *3.62%* | 21.22% | *9.90%* | 10.30% | -3.88% |
| **2- Justifiably eliminated** | | | | | | | | |
| *Vacancy rate* | | | | | | | | |
| Atlanta (MSA) | | | | 24.72% | 43.60% | *9.80%* | *9.60%* | 2.08% |

**Table 2.3.3- Review of the High-potential Metropolitan Areas**

| | Permits, density, intensity | | | | | | Equilibrium | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Vacancy rate | | | Rent increase 98-00 |
| | Proportion multi/total | Units per building | Density | Multi units allowed | Population July -98 | Units/10,000 persons | 1999 | 1998 | 99-98 | |
| *Areas chosen in the* | | | | | | | | | | |
| *Groupings of more than 3.7M inhabitants* | | | | | | | | | | |
| Boston, MA-NH PMSA........................................ | 16.87% | 17.95 | 3.03 | *1346* | 3289 | *4.09* | 3.10% | 4.10% | -24.39% | 4.95% |
| Chicago, IL PMSA.......................................... | 20.27% | 13.98 | *2.83* | 6998 | 7939 | *8.81* | 6.50% | 7.80% | -16.67% | 3.80% |
| Fort Worth-Arlington, TX PMSA............................. | 28.44% | 17.84 | 5.07 | 3580 | 1593 | 22.48 | 6.10% | 6.80% | -10.29% | 4.55% |
| New York, NY PMSA......................................... | 47.31% | 39.82 | 18.84 | 6385 | 8693 | *7.35* | 4.70% | 5.00% | -6.00% | 3.40% |
| Jersey City, NJ PMSA...................................... | 68.32% | 79.51 | 54.32 | *1034* | 557 | *18.55* | NA | NA | NA | NA |
| Nassau-Suffolk, NY PMSA................................... | 15.19% | 12.29 | *1.87* | *885* | 2673 | *3.31* | 1.90% | 4.90% | -61.22% | NA |
| Middlesex-Somerset-Hunterdon, NJ PMSA.......... | 13.43% | 14.75 | *1.98* | *811* | 1122 | *7.23* | 2.30% | 3.50% | -34.29% | NA |
| San Jose, CA PMSA......................................... | 46.32% | 21.92 | 10.15 | 3493 | 1641 | 21.28 | 2.10% | 2.20% | -4.55% | 7.40% |
| Washington, DC-MD-VA-WV PMSA.............................. | 23.40% | 20.76 | 4.86 | 8292 | 4674 | *17.74* | 6.60% | 8.30% | -20.48% | 2.75% |
| *Groupings of 2M to 3.7M inhabitants* | | | | | | | | | | |
| Seattle-Tacoma-Bremerton (CMSA) | 33.66% | 15.03 | 5.06 | 9442 | 3424.0 | 27.57 | 3.90% | 2.60% | *50.00%* | 4.80% |
| Minneapolis-St. Paul (MSA) | 14.11% | 16.50 | *2.33* | 2848 | 2831.0 | *10.06* | 4.20% | 3.90% | 7.69% | 3.00% |
| Denver-Boulder-Greeley (CMSA) | 26.36% | 14.16 | 3.73 | 7503 | 2365.0 | 31.73 | 5.60% | 4.00% | *40.00%* | 4.65% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Portland-Salem (CMSA) | 28.94% | 13.61 | 3.94 | 5751 | 2149.0 | 26.76 | 7.40% | 7.70% | -3.90% | 3.10% |
| San Diego (MSA) | 27.00% | 16 | 4.17 | 3521 | 2 780.0 | *12.67* | 4.20% | 5.10% | -17.65% | 5.3% |
| Miami, FL PMSA............................................ | 44.58% | 23.15 | 10.32 | 5109 | 2152 | 23.74 | 8.50% | 9.80% | -13.27% | 2.60% |
| | | | | | | | | | | |
| *Groupings of less than 2M inhabitants* | | | | | | | | | | |
| Norfolk-Virginia Beach-Newport (MSA) | 13.39% | 13.67 | *1.83* | *1102* | 1542.0 | *7.15* | 4.20% | 7.60% | -44.74% | NA |
| Columbus (MSA) | 28.42% | 10.83 | 3.08 | 3506 | 1469.0 | 23.86 | 7.40% | 7.90% | -6.33% | 2.90% |
| Charlotte-Gastonia-Rock Hill (MSA) | 23.87% | 12.64 | 3.02 | 4956 | 1383 | 35.83 | 7.90% | 10.40% | -24.04% | 3.55% |
| Austin-San Marcos (MSA) | 37.96% | 18.08 | 6.86 | 5911 | 1105.0 | 53.49 | 8.20% | 9.30% | -11.83% | 3.50% |

**Table 2.3.4- Review of the High-potential Metropolitan Areas**

Growth estimate forecast for 2000 to 2005

| | Population (000) | | Jobs 00-05 | | Pop./Households | | Jobs/Households | Household growth (000 |
|---|---|---|---|---|---|---|---|---|
| | 2000-05 | 2005 | % | Number (000) | 1999 | 00-05 | 1999 | 2000-2005 |
| *Areas chosen in the* | | | | | | | | |
| *Groupings of more than 3.7M inhabitants* | | | | | | | | |
| Boston, MA-NH PMSA | 123.75 | 3428.8 | 6.01% | 120.53 | 2.52 | *2.52* | *1.54* | *49.11* |
| Chicago, IL PMSA | 155.41 | 4331.8 | 5.92% | 467.00 | 3.07 | 2.73 | 1.56 | 56.93 |
| Fort Worth-Arlington, TX PMSA | 105.09 | 1736.4 | 8.79% | 69.02 | 2.62 | 2.79 | 1.23 | 37.67 |
| New York, NY PMSA | 83.00 | 8818.00 | 2.12% | 90.34 | 3.42 | 2.34 | 1.58 | 0 |
| Jersey City, NJ PMSA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nassau-Suffolk, NY PMSA | 15.01 | 1169.70 | 4.98% | 132.51 | NA | NA | NA | NA |
| Middlesex-Somerset-Hunterdon, NJ PMSA | 61.00 | 1198.40 | 9.56% | 61.85 | NA | NA | NA | NA |
| San Jose, CA PMSA | 88.50 | 1750.80 | 8.04% | 78.50 | 2.79 | *2.79* | *1.66* | *31.72* |
| Washington, DC-MD-VA-WV PMSA | 291.75 | 5031.10 | 7.44% | 199.18 | 2.65 | 2.29 | 1.45 | 127.40 |
| *Groupings of 2M to 3.7M inhabitants* | | | | | | | | |
| Seattle-Tacoma-Bremerton (CMSA) | 283.20 | 3754.10 | 9.54% | 137.39 | 3.65 | 2.26 | 1.85 | 125.31 |
| Minneapolis-St. Paul (MSA) | 138.28 | 3006.30 | 6.50% | 113.42 | 2.61 | 2.36 | 1.54 | 58.59 |
| Denver-Boulder-Greeley (CMSA) | 167.08 | 2579.60 | 8.68% | 99.60 | 2.99 | 2.24 | 1.59 | 74.59 |
| Portland-Salem (CMSA) | 140.85 | 2325.10 | 8.15% | 80.38 | 3.00 | 2.42 | 1.49 | 58.20 |
| San Diego (MSA) | 232.93 | 3071.60 | 10.69% | 121.79 | 2.77 | 2.66 | 1.1 | 87.57 |
| Miami, FL PMSA | 44.92 | 1023.10 | 5.85% | 124.44 | 2.79 | 2.79 | 1.28 | 16.10 |
| *Groupings of less than 2M inhabitants* | | | | | | | | |
| Norfolk-Virginia Beach-Newport (MSA) | 63.92 | 1603.30 | 5.91% | 41.31 | 2.55 | *2.55* | NA | *25.07* |
| Columbus (MSA) | 72.11 | 1555.00 | 7.25% | 62.49 | 2.56 | 2.02 | 1.45 | 35.70 |
| Charlotte-Gastonia-Rock Hill (MSA) | 44.99 | 825.20 | 7.32% | 98.92 | 2.59 | 2.42 | 1.45 | 18.59 |
| Austin-San Marcos (MSA) | 96.52 | 1239.70 | 11.07% | 71.21 | 2.49 | 2.20 | 1.35 | 43.87 |

Sources of data on households: US Marketing Systems Group of CACI International Inc.

## 2.4 Metropolitan Market Ranking in the Office Sector

### 2.4.1 A Brief Background

After an important construction period in the 80s, the construction levels fell, the vacancy rates reached record levels and buildings lost value. In 2000, there is fear of a new supply surplus because the construction rate has increased in the past two years. The real estate recession of the 90s has been abundantly documented and allows us today to take a more educated look at the real estate cycles.

The office and hotel markets have experienced two growth cycles while the economy has experienced five. The supply of office space does not seem to be related to demand. Furthermore, the rents very closely follow the supply rather than the demand: they reached a peak during the recession of 81-82 and a valley in 1992 during a high demand. The risk in this sector is associated with an overproduction that is not synchronized with the demand.

The main reasons for this lack of harmony are the long time lag between the supply response to demand, the intrinsic long-term nature of real estate that prolongs the rent and surplus supply adjustment period, and the uncertainty regarding the extent of the demand. Specifically, it takes a long time to plan and construct buildings: the average time lapse is two years. For example, in the event of a recession, it is difficult to halt a project already developed. The volatility of the supply is consequently more important than in other real estate sectors. Similarly, owners' apathy to adjusting leases to the economic conditions can be a source of a persistent vacancy rate. They prefer adjusting rental incentives.

### 2.4.2 The Tertiarization of the Economy and City Growth

For the past ten years, the demand for office space has grown continuously because of the tertiarization of the economy. The determining element of tertiarization is the use of services in designing a product or another service. It is estimated that manufacturing enterprises purchase $0.39 of services for every dollar of products they export. Admittedly, technological progress has allowed an increased use of capital in the services sector and has helped improve productivity, but it has also contributed to making tasks more complex in all sectors of the economy, whence the job growth among specialist sub-contractors, who are furthermore spatially detached from their client and operate more and more independently on the international markets.

Hence, the consolidations in the financial sector that are going on elsewhere can hit a region hard without warning. Work is being reorganized. The call centres and the data processing centres are specializing in emerging cities where the quality of life attracts a skilled labour force. *The quality of life is therefore an important growth factor for a region.* For example, Charlotte is assembling such centres and is slowly becoming a knowledge-based economy. It still must create the foundations necessary for its full development, especially in technology and human resources, to fully capitalize on this new trend.

Cyberspace allows exchanging anything that can be reduced to BYTES. Videoconferencing, telemedicine, telecontrol, telepresence, aspatiality... are transforming the work universe. In spite of all this, the decline in the size of the major cities because of telework is a myth. Similarly, the neighbourhood telecentres, where companies rent cabled space for their employees, are not viable. The identity of this space would be based on neighbourhood relations and no longer on the culture of the parent company. In passing, we note that cybernauts communicate ten times more with their *in-house* colleagues than with strangers. Paradoxically, the new information systems strengthen the local networks and the cities. Many sociology gurus conclude that *the new information technologies will lead to in-city applications for the city*. Indeed, the transition to the new economy has saved the urban America that contains the highest ranked universities in the world and a solid potential pool of qualified labour.

On the other hand, we note the emergence of new regional economies based on high technology, like Silicon Valley, Austin or Salt Lake City. These cities are characterized by a concentration of very specialized industries grouped around institutions and universities supplying the knowledge necessary for the development of the enterprises. The research triangle, located less than 600 miles from 50% of the American population (New York, Philadelphia, Washington, Atlanta), includes the emerging cities of Raleigh, Durham, Chapel Hill, Hillsborough, and now extends more westward to Greensboro. The computer industries (IBM: 14,000 employees), biotechnology (Duke University: 12,500 employees) and telecommunication (Nortel: 8,500 employees) are multiplying there. If the emerging city wishes to grow, access to a qualified labour force must never become a limitation.

### 2.4.3 Current American Trends

The vacancy rate provides an indication of the position in the cycle. For 2000, an increase in the vacancy rate for office spaces is expected for the first time since 1991. On the other hand, this indicator does not faithfully reflect the balance because, for example, there is some subletting, certain buildings are not completed after a year and the level of equilibrium can vary depending on the metropolitan area. Furthermore, this rate is not available for all the markets.[13]

The forecasts for the office market are very moderately optimistic; 1999 seems to mark the cycle's turning point. Vacancy rates remained relatively stable and rent growth is still supported and well above the inflation rate. Rent growth of 4-5% is forecast until 2005 because the leases signed today for the next five years reflect the market conditions of the last years. For new construction, however, the issue is different. The income risk for this type of asset is greater, depending on the quality of the tenant and the term of the lease.

New construction outstrips absorption by an average of 20%. This is the biggest issue at the present time. The vacancy rates should certainly increase in 2000. How fast will the supply adjust this time? As mentioned, the office building sector is highly revealing of a region's economic growth. With the economy's tertiarization, these buildings house a region's economic base. However, because of the long construction timeframes when the window of opportunity is fairly narrow, this type of project is at higher risk than a high-rise apartment building, for example.

The demand is also influenced by the growth in office jobs and the private decision makers' very volatile expectations for the economic climate. "If business slackens even moderately, the impact will hit the office markets late in 1999 or shortly thereafter. When that happens, the steam won't be out of the engine but it will certainly be chugging, especially in some west coast markets."[14]

The demand is also influenced by the cities' personalities. Thus, New York, San Francisco and Washington are international-calibre cities. None of these cities has a sufficient level of development underway to really satisfy the needs of the demand. Other cities are experiencing job growth in some new sectors. For example, Charlotte, now a financial centre, and Denver both attract data processing and call centres.

In addition, in examining the markets, it is necessary to envision the distribution of the regional market between the downtown and the suburbs and between class A and class B. In 1999, 23.9 million square feet were built in the downtowns and 107.7 million in the suburbs. The 20% downtown/80% suburb ratio is the same for absorption. We are simply mentioning here that in the suburbs, the availability of land, the proximity of the labour force and good schools, the lower occupancy and operating costs, and the technical content of the buildings contribute to creating genuine satellite cities almost independent from their central nucleus. This is the case in Atlanta, for example. "The potential investor has to view the Central Business District of the 21st century as one office market within a polycentric group of competing urban office markets."[15] In this analysis of indicators of potential, however, to select the ten best markets, we are limiting ourselves to averages.

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[13] Gallagher M. & Wood A, 1999, *Fear of Overbuilding in the Office Sector: How Real is the Risk and Can We Predict it?* Journal of Real Estate Research, Volume 17, No. 2.

[14] ONCOR International,1999, *North America Office Market Report: Mid-Year 1999.*

### 2.4.4 Estimates and Analysis of the Results

#### *Survey universe*

To compare the cities with each other, we selected the data from SIOR[16], because these are also the data that the *Bureau of Census* uses.[17] These data focus on smaller metropolitan statistical areas (MSA) rather than on the large consolidated metropolitan statistical areas (CMSA) used for the residential analysis. Since we are limiting ourselves to averages for selecting the ten best markets, the MSA universe was deemed preferable for the cursory examination of these markets.

#### *Office jobs selected*

The growth in office jobs is based on the growth in the following job categories: real estate finance and business, services to business, public administration.

#### *Demand estimate*

Normally, the number of employees per square foot has a cyclical component. From the end of the 80s to the mid-90s, the ratio increased because of rationalization and also because space became less costly. Since then, the ratio has decreased but its long-term trend is constant. Hence, through simple multiplication we should obtain the need for office space. Yet, considering the data we had for 1997-98-99, the correlation between office jobs and construction was not right. Consequently, for the market equilibrium, we selected the vacancy rates as well as the relationship between absorption and vacant space plus construction.

Demand growth could not be entirely based on the office job growth forecast by the *Department of Commerce*.[18] To estimate the future demand, we combined two indicators: the office job forecasts for 2000 to 2005 and the absorption forecasts by SIOR.

#### *Supply estimate*

The supply forecasts are based on the forecast comments made by SIOR in each of the markets. Here, it is important to understand that an unemployment rate that is too low in certain markets reduces the possibility of job growth.

#### *Presentation of the results*

The data collected are shown in Appendix A. Tables 2.4.1 and 2.4.2 summarize the indicators we obtained from these data. Table 2.4.3 indicates the cities that were not selected for detailed analysis because they did not meet the minimum criteria set for the quantity of activity, the intensity and the market equilibrium.

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[15] Central Business Districts: Dead or Alive?

[16] SIOR: Society of Industrial and Office Realtors, Landauer Real Estate Counselors.

[17] Oncor and CB Commercial also publish some very valid data.

[18] Regional Economic Analysis Division, Bureau of Economic Analysis, United States Department of Commerce.

A vacancy rate over 10% is normally considered as being too high. This is the case in medium size cities such as Cincinnati, Cleveland, Indianapolis, Jacksonville, Philadelphia and Pittsburgh, which have suffered from the consolidation of the financial sector. As for the cities of Atlanta, Chicago, Miami and Orlando, they are suffering from excessive building and a surplus supply. In Greensboro, the problem is temporary: construction is active there because, in comparison with Raleigh, the labour available close to the research triangle is abundant.

Construction activity is too limited in the cities of Charleston and Gainesville, Grand Rapids and Hartford. We note in passing that Gainesville is experiencing roadway congestion problems and that Charleston risks suffering from the debates concerning tobacco. In the cities of Greenville, Harrisburg, Hartford, Melbourne, Portland, Springfield, Syracuse and Rochester, not only is there not enough activity, but the risk is also too great on account of the vacancy rate. Detroit's economic base is highly dependent on the automobile industry and the intensity of tertiary activity is still too weak there. Similarly, in no respect is the situation bright in Buffalo and Milwaukee.

New York City will have to be broken down to properly understand the geographic sectors to be analyzed. For example, the centre of New Jersey should be avoided because of excessively strict regulations. In addition, we will choose one of the ten cities for a detailed analysis taking into account the hotel and shopping centre sectors.

We note here that the best locations for industrial-type buildings are close to the airports since the overly popular Internet retailers are now setting up distribution centres there. For your guidance, we have collected and appended some data on this sector. The cursory examination indicates a good industrial potential in Gainesville, Cincinnati, Detroit and Minneapolis.

The eleven areas selected for the detailed analysis in the next chapter are the following: Manhattan, New Jersey, Chicago, Washington, Baltimore, Boston, Miami/Fort Lauderdale, Orlando/Tampa, Columbus, Charlotte and Norfolk. Because it is a major city, we kept Chicago even though its equilibrium potential did not meet our performance benchmarks. We also kept Norfolk in spite of its weak construction activity and intensity, because this city appeared to be making the technological conversion.

**Table 2.4.1- Summary of the Activity, Intensity and Equilibrium Indicators**

| | | | 1000 persons | | Inventory | rate | (vac + constr.) |
|---|---|---|---|---|---|---|---|
| Atlanta, Georgia | 4,780,470 | 6,062,138 | 1,322 | 1,585 | 5.65% | 11.4 | 0.29 |
| Baltimore, Maryland | 679,949 | 1,445,276 | 274 | 580 | 3.66% | 9.8 | 0.48 |
| Boston, Massachusetts | 2,450,300 | 12,588,621 | 421 | 2,136 | 11.01% | 7.1 | 0.17 |
| Buffalo, New York | 454,000 | 208,000 | 388 | 181 | 2.43% | 14.4 | 0.01 |
| Charleston, South Carolina | 0 | 385,000 | 0 | 708 | 9.83% | 8.8 | 0.2 |
| Charlotte, North Carolina | 2,194,700 | 4,400,000 | 1,636 | 3,130 | 15.87% | 8.8 | 0.27 |
| Chicago, Illinois | 0 | 4,233,568 | 0 | 531 | 2.85% | 11.6 | -0.09 |
| Cincinnati, Ohio | 600,000 | 532,000 | 374 | 327 | 1.65% | 9.6 | 0.09 |
| Cleveland, Ohio | 194,000 | 899,116 | 87 | 405 | 2.47% | 10.7 | 0.15 |
| Columbia, South Carolina | 225,000 | 515,000 | 456 | 995 | 4.92% | 8.2 | 0.36 |
| Columbus, Ohio | 1,375,000 | 2,090,000 | 943 | 1,414 | 6.67% | 4.5 | 0.21 |
| Detroit, Michigan | NA | 805,000 | NA | 180 | 1.08% | 4.6 | 0.64 |
| Fort Lauderdale, Florida | 225,793 | 777,369 | 155 | 519 | 2.48% | 6.7 | 0.38 |
| Gainesville, Florida | 46,000 | 227,685 | 232 | 1,104 | 9.96% | 3.2 | 0.45 |
| Grand Rapids, Michigan | 435,000 | 320,000 | 425 | 306 | 3.02% | 9.2 | 0.31 |
| Greensboro, North Carolina | 500,677 | 564,824 | 434 | 479 | 3.94% | 13.5 | 0.04 |
| Greenville, South Carolina | 251,000 | 347,000 | 277 | 374 | 5.80% | 17.7 | 0.35 |
| Harrisburg, Pennsylvania | 470,000 | 240,000 | 762 | 389 | 0.67% | 3.6 | -0.08 |
| Hartford, Connecticut | NA | NA | NA | NA | NA | 19.1 | NA |
| Indianapolis, Indiana | 832,000 | 307,544 | 553 | 201 | 1.43% | 9.5 | 0.54 |
| Jacksonville, Florida | 874,540 | 1,170,261 | 856 | 1,105 | 7.80% | 10.1 | 0.53 |
| Melbourne, Florida | 30,800 | 60,000 | 67 | 128 | 1.36% | 13.5 | 0.29 |
| Miami, Florida | 630,000 | 1,429,439 | 301 | 670 | 4.67% | 10.3 | 0.26 |
| Milwaukee, Wisconsin | NA | 550,000 | NA | 377 | 2.12% | 10.2 | 0.08 |
| Norfolk, Virginia | 0 | 129,000 | 0 | 83 | 0.69% | 6.9 | 0.38 |
| NY- Manhattan, New York | 1,600,000 | 3,293,000 | NA | NA | 0.97% | 7.1 | 0.15 |
| NY- New York | 0 | NA | 0 | NA | NA | NA | NA |
| NY-Brooklyn/Queens, NY | NA | NA | NA | NA | NA | 4.8 | NA |
| NY-Long Island, New York | NA | 1,122,000 | NA | 419 | 2.97% | 7 | 0.29 |
| NY-New Haven, Connecticut | 0 | 390,000 | 0 | 239 | 2.81% | 15.2 | 0.14 |
| NY-NJ-Central-Middlesex-Somerset-Hunterdon | 650,000 | 1,595,290 | 591 | 1,409 | 2.39% | 10.7 | 0.45 |
| NY-NJ-North-Bergen-Passaic, Jersey City, Newark | 584,047 | 3,845,430 | 153 | 995 | 5.36% | 15.3 | 0.56 |
| NY-NJ-South-Trenton | 876,000 | NA | 2,649 | NA | NA | 9.7 | NA |
| Orlando, Florida | 635,000 | 2,421,000 | 441 | 1,581 | 11.31% | 10.7 | 0.41 |
| Philadelphia, Pennsylvania | 1,107,300 | 777,459 | 224 | 157 | 0.89% | 10.4 | 0.16 |
| Pittsburgh, Pennsylvania | NA | 755,000 | NA | 323 | 2.22% | 12.1 | -0.05 |
| Portland, Maine | NA | 85,000 | NA | 333 | 1.30% | 3.9 | 0.15 |
| Raleigh, North Carolina | 1,139,267 | 2,194,495 | 1 089 | 1,992 | 8.87% | 7.1 | 0.45 |
| Richmond, Virginia | 480,000 | 630,000 | 509 | 653 | 3.14% | 9.2 | 0.21 |
| Rochester, New York | NA | NA | NA | NA | NA | 12.5 | NA |
| Springfield, Massachusetts | NA | 50,000 | NA | 87 | 1.13% | 10.3 | 0.19 |
| Syracuse, New York | 0 | NA | 0 | NA | NA | 13.6 | NA |
| Tampa, Florida | NA | 1,274,525 | NA | 559 | 5.53% | 8.1 | 0.34 |
| Washington, D.C. | 2,783,463 | 4,346,326 | 605 | 922 | 4.89% | 4.4 | 0.25 |
| Washington, D.C. - Northern Virginia | 1,041,169 | 10,165,342 | NA | NA | 8.71% | 3.3 | 0.48 |
| Washington, D.C.- Suburban Maryland | 164,869 | 2,845,221 | NA | NA | 4.31% | 7.3 | 0.15 |

**Table 2.4.2- Summary of the Growth Potential Indicators**

| | Office Jobs (000) | | | SIOR Forecasts | |
|---|---|---|---|---|---|
| | 2000 | 2005-2000 | Absorption | Vacancy | Construction |
| Atlanta, GA | 1,076 | 115 | 0.00% | NA | 0.00% |
| Baltimore, MD | 732 | 43 | 0.00% | 2.50% | 0.00% |
| Boston, MA | 1,193 | 92 | 8.00% | 3.00% | 3.00% |
| Buffalo-Niagara Falls, NY* | 366 | 20 | 3.00% | -3.00% | 3.00% |
| Charleston, South Carolina | NA | NA | 3.00% | -3.00% | 3.00% |
| Charlotte-Gastonia-Rock Hill, NC-SC | 390 | 40 | -3.00% | 3.00% | -3.00% |
| Chicago, IL | 2,213 | 164 | 0.00% | 3.00% | -3.00% |
| Cincinnati, OH-KY-IN | 434 | 31 | -8.00% | 8.00% | -3.00% |
| Cleveland-Lorain-Elyria, OH | 576 | 26 | 3.00% | 8.00% | 3.00% |
| Columbia, SC* | 257 | 22 | 8.00% | -3.00% | 8.00% |
| Columbus, OH | 468 | 37 | 0.00% | 0.00% | -13.00% |
| Detroit, MI | 1,030 | 43 | 8.00% | 0.00% | 8.00% |
| Fort Lauderdale, FL* | 466 | 52 | 0.00% | 4.00% | 0.00% |
| Gainesville, FL* | 120 | 11 | 0.00% | 3.00% | 0.00% |
| Grand Rapids-Muskegon-Holland, MI* | 303 | 26 | 25.00% | -8.00% | 13.00% |
| Greensboro-Winston-Salem-High Point, NC | 290 | 29 | 0.00% | -3.00% | 3.00% |
| Greenville-Spartanburg-Anderson, SC* | 259 | 25 | 8.00% | 0.00% | 8.00% |
| Harrisburg-Lebanon-Carlisle, PA* | 266 | 21 | 8.00% | -8.00% | 8.00% |
| Hartford, CT | 345 | 27 | 8.00% | 0.00% | 0.00% |
| Indianapolis, IN | 418 | 31 | 4.00% | 4.00% | 0.00% |
| Jacksonville, FL* | 381 | 33 | 0.00% | 8.00% | 3.00% |
| Melbourne, Florida | NA | NA | 3.00% | -3.00% | 8.00% |
| Miami, FL | 539 | 41 | 3.00% | -3.00% | 3.00% |
| Milwaukee-Waukesha, WI | 425 | 30 | 3.00% | 0.00% | -8.00% |
| Norfolk-Virginia Beach-Newport, VA-NC | 388 | 22 | 0.00% | 0.00% | 3.00% |
| Manhattan, New York | NA | NA | 3.00% | -3.00% | 3.00% |
| Newark, NJ* | 709 | 34 | 4.80% | 1.61% | 0.00% |
| NY-Brooklyn/Queens | NA | NA | 8.00% | 4.00% | 4.00% |
| NY-Long Island, New York | 662 | NA | 8.00% | -3.00% | -3.00% |
| NY-New Haven, Connecticut | 561 | 45 | 8.00% | -8.00% | 8.00% |
| NJ-Central-Middlesex-Somerset-Hunterd | 411 | 47 | 3.00% | -3.00% | -8.00% |
| NJ-North | NA | NA | 8.00% | 0.00% | 3.00% |
| NJ-South-Trenton | NA | NA | -8.00% | 4.00% | 0.00% |
| Orlando, FL | 544 | 80 | -8.00% | 3.00% | 8.00% |
| Philadelphia PMSA, PA-NJ | 1,327 | 78 | 3.00% | -3.00% | NA |
| Pittsburgh, PA | 588 | 33 | -3.00% | 3.00% | -8.00% |
| Portland, Maine | NA | NA | 3.00% | 0.00% | 8.00% |
| Raleigh-Durham-Chapel Hill, NC | 402 | 42 | 3.00% | 3.00% | 3.00% |
| Richmond-Petersburg, VA | 296 | 20 | -3.00% | -3.00% | -3.00% |
| Rochester, New York | NA | NA | 0.00% | 0.00% | 8.00% |
| Springfield, Massachusetts | NA | NA | 8.00% | 0.00% | 3.00% |
| Syracuse, New York | NA | NA | 3.00% | -3.00% | 0.00% |
| Tampa-St. Petersburg-Clearwater, FL | 762 | 85 | 11.20% | 8.00% | 3.00% |
| Washington, DC | 1,820 | 117 | 0.00% | 0.00% | -8.00% |
| Washington, D.C. - Northern Virginia | NA | NA | 4.00% | 13.00% | -3.00% |
| Washington, D.C. - Suburban Maryland | NA | NA | -3,00% | 13,00% | -3,00% |

**Table 2.4.3- Cities Justifiably Not Selected**

| 1999 Activity | | 1999 Intensity | | | 1999 Equilibrium | | |
|---|---|---|---|---|---|---|---|
| | Construction | | Construction/ 1,000 persons | Construction/ Inventory | | Vacancy rate | Abs/(vac + constr) |
| Elimination benchmark | Less than 500,000 | | Under 350 | Under 2.47 | | Over 10.0% | Less than 0.15 |
| | | | | | Atlanta, Georgia | 11.4 | |
| Buffalo, New York | 208,000 | Buffalo, New York | 181 | 2.43% | Buffalo, New York | 14.4 | 0.01 |
| Charleston, S. Carolina | 385,000 | | | | | | |
| | | | | | Chicago, Illinois | 11.6 | -0.09 |
| | | Cincinnati, Ohio | 327 | 1.65% | Cincinnati, Ohio | 9.6 | 0.09 |
| | | Cleveland, Ohio | | 2.47% | Cleveland, Ohio | 10.7 | 0.15 |
| | | Detroit, Michigan | 180 | 1.08% | | | |
| Gainesville, Florida | 227,685 | | | | | | |
| Grand Rapids, Michigan | 320,000 | Grand Rapids, Michigan | 306 | | | | |
| | | | | | Greensboro, N. Carolina | 13.5 | 0.04 |
| Greenville, S. Carolina | 347,000 | | | | Greenville, S. Carolina | 17.7 | |
| Harrisburg, Pennsylvania | 240,000 | Harrisburg, Pennsylvania | | 0.67% | Harrisburg, Pennsylvania | | -0.08 |
| | | | | | Hartford, Connecticut | 19.1 | |
| Indianapolis, Indiana | 307,544 | Indianapolis, Indiana | 201 | 1.43% | Indianapolis, Indiana | 9.5 | |
| | | | | | Jacksonville, Florida | 10.1 | |
| Melbourne, Florida | 60,000 | Melbourne, Florida | 128 | 1.36% | Melbourne, Florida | 13.5 | |
| | | | | | Miami, Florida | 10.3 | |
| | | Milwaukee, Wisconsin | | 2.12% | Milwaukee, Wisconsin | 10.2 | 0.08 |
| Norfolk, Virginia | 129,000 | Norfolk, Virginia | 83 | 0.69% | | | |
| | | | | | Orlando, Florida | 10.7 | |
| | | Philadelphia, Pennsylvania | 157 | 0.89% | Philadelphia, Penn | 10.4 | |

|  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|
|  |  | Pittsburgh, Pennsylvania | 323 | 2.22% | Pittsburgh, Penn | 12.1 | -0.05 |
| Portland, Maine | 85,000 | Portland, Maine | 333 | 1.30% | Portland, Maine |  | 0.15 |
|  |  |  |  |  | Rochester, New York | 12.5 |  |
| Springfield, Mass | 50,000 | Springfield, Massachusetts | 87 | 1.13% | Springfield, Mass | 10.3 |  |
|  |  |  |  |  | Syracuse, New York | 13.6 |  |

## 2.5 Metropolitan Market Ranking in the Shopping Centre Sector

### 2.5.1 Data Availability: A Significant Limitation in this Analysis

The availability of data on the retail market caused serious problems and delays.

Retail sales by metropolitan area are compiled every five years. The latest data available date back to 1992 and 1997 and the next will not be available until 2002. FW Dodge is the principal supplier of data on the non-residential construction market. We asked them for data on the shopping centres by metropolitan area but they only sell certain data solely for nine census areas at a cost of US$1,000 per area.

Given this lack of data, we obtained from ICSC (International Council of Shopping Centers) some data compiled at state level on the shopping centres. The data on metropolitan shopping centre construction, absorption rate and vacancy rate are collected by various brokers. But, the extent of the information available is limited. We were informed that a special compilation would be possible but at an exorbitant cost.

Furthermore, the neighbourhood shopping centres and the regional centres do not have same geographic scope and their respective ranking varies so much from one geographic region to another that the data on the vacancy rates are difficult to interpret and compare. Neither do the changes and the wide variety of retail trade formats and restructuring concepts facilitate interpretations. In the following table, we provide the construction orientation for the year 2000, as perceived by the professionals in the sector, according to the classifications used:

| Type of new construction | Percentage of respondents indicating construction |
|---|---|
| Grocery anchored strip centers | 53% |
| Neighbourhood shopping centers | 47% |
| Main street/urban centers | 27% |
| Big box/power centers | 26% |
| Regional malls | 26% |
| Freestanding stores | 21% |
| Hybrid centers | 12% |

Source: Valley Matt, December 1999, *2000 Industry Forecast*, Shopping Center World,

### 2.5.2 The Key Relations

The supply is a function of the sales per square foot and the construction costs, specifically the interest rate and the land development costs. The supply adjusts slowly to the levels of retail sales. Specifically, the more costly the market is to develop, the poorer the correlation is between construction and retail sales. The lower the availability of land, the slower the supply adjustment. A rise in demand is first reflected in an increase in rents and a significant decrease in the vacancy rates. Then, as construction satisfies the demand, the rents decrease. It therefore becomes difficult to evaluate the demand and the speed at which the supply adjusts to the demand.

The demand for *community* retail space is correlated with the local economic conditions, but it is not necessarily so for the demand for *regional* retail space. The largest economic factor that stimulates retail sales is job growth. Moreover, demographics are increasingly becoming an engine of retail sales growth. Hence, since two-thirds of household growth will occur in the age 45-54 category, the one with the highest discretionary spending, retail sales per square foot have risen since 1996. Luxury stores such as Banana Republic and Neiman Marcus are posting good performances.

The geography of retail stores is closely related the value of time for the consumer. Retail sales are now linked to a form of entertainment and to vacations. The very time-pressed consumer thus connects utility with pleasure.

In the neighbourhood shopping centres, it is the cinemas that generate the most traffic and sales. The addition of movie theatres increased by 30% in 1998. The new urban complexes that combine entertainment, sports and the retail trade are greatly appreciated. "A recent outgrowth of the entertainment concept is the new retail/entertainment complexes with movie theatres, restaurants, virtual reality venues, and sports arenas which represent the next wave of major developments in the retail sector."[19]

Disney World, the Grand Canyon and Las Vegas are the most visited sites and the performance of the shopping centres there is excellent. This is also why the sales point centres of more than 600 manufacturers and the warehouse stores are multiplying close to tourism regions and are cornering the market shares of the regional shopping centres.

Electronic commerce is also responding to the consumer's time constraints and suburban traffic congestion. The majority of shopping centre owners and financing professionals mention on-line commerce as being the greatest challenge to be faced in the 2000s. Books, computers and music are seen as the categories most vulnerable to electronic commerce.

### 2.5.3 Current Trends

In spite of all the pessimistic 1998 forecasts for 1999, retail sales increased by 8.9% in 1999. Consumers are continuing to spend in January 2000 and their confidence has not yet been shaken. In spite of everything, new investments in shopping centres seem to be very risky for several reasons. Three factors stand to contribute significantly to the decline in retail space demand and supply in the coming years:

- Since 1996, the consumer confidence index has not stopped rising with the result that consumer debt is growing at a faster pace than disposable income. The savings rate is at its lowest level.
- The upward trend in interest rates is raising the economic rent of development and cancelling out any anticipated income growth.
- At the present time, there are an estimated 300 million square feet vacant. According to the ICSC[20], retail space rose from 15.2 square feet per person to 18.9 square feet per person between 1986 and 1996, a period when retail sales were stagnating. The trend continued between 1996 and 1999: we note a 10% increase in construction while the population grew by only 3.7%.

In this context, the shopping centres serving a neighbourhood with common consumer goods and the regional super-centres with high-end stores will post the best performance. The big winners are located in the suburbs. "The safest development play was the grocery-anchored neighborhood center."[21] Similarly, the downtown neighbourhoods that are becoming middle-class need retail space. The average American vacancy rate was 6.9% in 1999.

It therefore becomes very important to accurately situate the supply-to-demand deficits.

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[19] The Greenwich Group International Market Research Department, 1997, *The Retail Market*.

[20] International Council of Shopping Centers.

[21] Bach, R. and Young, N., 1999, *1999 Real Estate Forecast*, Grubb & Ellis Company.

### 2.5.4 Analysis of the Results

The results of analysis of the appendix are presented in Table 2.5.1.

***Equilibrium***

A very well documented study conducted in 1997 compared rental area (in square feet) per capita by metropolitan markets. The results are presented in an appendix. The highest GLAPCs (gross leasable area per capita) are maintained by the tourist destinations: Fort Lauderdale, Orlando and Las Vegas belong to them. The demand or the desirable level of GLAPC was also estimated in each of the regions based on retail sales. By comparing the two GLAPC measurements, we obtained a benchmark for identifying the markets over-weighted by the supply of square feet. In early 1997:

- There was a deficit supply in the following markets: New York, Baltimore and Boston.
- Orlando, Columbus and Miami seemed in equilibrium.
- Some large supply-to-demand surpluses were recorded in the following areas: Nassau-Suffolk, Newark, Washington DC, Philadelphia, Norfolk, Raleigh.

What has happened since then? The vacancy rate data for the areas under study are shown in Table 2.5.1. As already mentioned, these data are very fragmented and we chose to review the specialized literature to understand a bit about what was happening in each of the regions. The *International Council of Shopping Centers* compiles data on sales in shopping centres. The growth in the CSSS (Comparable Same Store Sales) for 1999 is also indicated in the table. Similarly, the forecasts for upward demand pressures on the supply were estimated from the job, real wages and total residential construction forecasts for the next five years. The vacancy rate and rent data by market segment for the areas under study are shown in Table 2.5.2.

***Northeast***

In the Northeast, per-square-foot sales growth was 3.9% in New England. This excellent performance is above all attributable to the restructuring of the commercial landscape and the introduction of new concepts. In fact, the population is not growing much in this region. We mention Boston as an exception to this rule: the CSSS increased 3.6% and the anticipated growth in jobs and real wages for 2005 will be significant. To the west of Boston, the activity domain is posting gains that have not been seen since the middle of the 80s. This situation is, to a certain extent, attributable to the growth in the high technology and outsourcing sector. The growth in women managers/professionals will take place primarily in the American Northeast where we already find the strongest contingent.

Also in the Northeast, growth in per-square-foot sales was 0.1% in 1999. In spite of everything, demand remains very strong throughout New Jersey. Vacancy rates in northern New Jersey fluctuate between 3 and 5%. Three *power centres* are proposed in the centre. We mention here that residential growth will continue in New York.

***Great Lakes***

The growth in per-square-foot sales was in the range of 3.9% in 1999. Real estate is healthy everywhere except in Detroit and Cleveland, which show extremely high vacancy rates. Cincinnati recorded CSSS gains of 6%. Residential construction is fuelling the development of shopping centres. We note here that this growth is forecast to be very strong in Chicago, a city of neighbourhoods that offers incentives for setting up neighbourhood stores. Chicago continues to reign with an anticipated absorption of 3.8 million square feet out of a total of 153 million.

***South***

The growth in per-square-foot sales was in the range of 2.4% in 1999. The South is experiencing sales losses: in particular, the CSSS lost ground in Greensboro, Norfolk and Tampa. We are also seeing a fairly widespread rise in vacancy rates, primarily due to recent overly extensive construction. In this landscape, however, we see that Charlotte is doing well and the future demand is expected to be strong because of the growth in jobs and real wages. The prospects for growth are also excellent in Tampa, Orlando and Fort Lauderdale. Fort Lauderdale and Charlotte are posting vacancy rates of 9.7% and 9.6% respectively. Miami is a front-runner for the vitality of its downtown. However, retail trade in this city is very dependent upon Latin America, which is currently in a bad economic position. Raleigh-Durham is greatly increasing its inventory.

***Estimates of future potential***

The best indicator of the commercial space demand remains the total residential development.[22] Consequently, the targeted cities with a high potential in the residential sector are likely to have a high potential in the retail trade sector. The retailers are setting up in the growing, small *edge cities* of single-family homes, such as Olive Branch near Memphis, Mesquite near Las Vegas, located on the edges of the large metropolitan areas. Closer to home, two regional shopping and entertainment centres are planned in Montreal: one in Blainville, the other in Mirabel. We mention here that the supply is controlled by a few specialized builders, which in itself constitutes an entry barrier.

The cities selected for a more detailed analysis in the next chapter are the unavoidable large ones or, Manhattan, Chicago, Washington, Baltimore and, of course, Miami/Fort Lauderdale and Orlando/Tampa. Charlotte was the one chosen from the small areas.

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[22] Born, W., 1988, *A Real Estate Market Research Method to Screen Areas for New Construction Potential,* The Journal of Real Estate Research, Volume 3, Number 3.

Table 2.5.1- Anticipated Construction, Vacancy and Growth: Shopping Centres

| Market | Construction in square feet | | | CSSS | Vacancy rate | | | Growth 2000-05 | |
|---|---|---|---|---|---|---|---|---|---|
| | 97 | 98 | 99 | 99 | 97 | 98 | 99 | Real wages | Residential demand |
| Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA | NA | NA | NA | 3.60% | NA | NA | NA | 2.25 | NA |
| Charlotte-Gastonia-Rock Hill, NC-SC MSA | NA | NA | NA | 1.70% | 7.60% | 9.00% | NA | 1.7 | 56,257 |
| Chicago-Gary-Kenosha, IL-IN-WI CMSA | 3,200,000 | 4,500,000 | 5,005,891 | 2.60% | 9.50% | 8.60% | 7.80% | 1.51 | 161,278 |
| Cincinnati-Hamilton, OH-KY-IN CMSA | 1,300,000 | 1,500,000 | NA | 6.00% | 7.60% | 7.20% | NA | 1.59 | 35,729 |
| Cleveland-Akron, OH CMSA | 1 million/year for past 10 years | | | 0.70% | 8.00% | NA | NA | 1.38 | NA |
| Columbus, OH MSA | NA | NA | NA | NA | NA | NA | NA | 1.45 | 40,257 |
| Detroit-Ann Arbor-Flint, MI CMSA | NA | NA | NA | 0.90% | NA | NA | NA | 1.63 | 77,283 |
| Greensboro--Winston-Salem--High Point, NC MSA | NA | NA | NA | -2.50% | NA | NA | NA | NA | 37,797 |
| Greenville-Spartanburg-Anderson, SC MSA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indianapolis, IN MSA | NA | NA | 800,000[?] | 1.20% | NA | 12.40% | NA | 1.24 | 47,588 |
| Jacksonville, FL MSA | NA | 3,200,000 | NA | NA | NA | NA | NA | 0.21 | 39,687 |
| Fort Lauderdale, FL PMSA | NA | NA | NA | NA | NA | NA | NA | 0.78 | 66,113 |
| Miami, FL PMSA | NA | NA | NA | NA | NA | NA | NA | 0.85 | 54,866 |
| Milwaukee-Racine, WI CMSA | NA | NA | NA | NA | NA | NA | NA | 1.05 | NA |
| Nassau-Suffolk, NY PMSA | NA | NA | NA | NA | NA | NA | NA | 1.07 | NA |
| New York, NY PMSA | NA | NA | NA | NA | NA | NA | NA | 0.97 | 192,780 |
| Newark, NJ PMSA | NA | NA | NA | NA | NA | NA | NA | 1.51 | NA |
| Norfolk-Virginia Beach-Newport News, VA-NC MSA | NA | NA | NA | -3.30% | NA | NA | NA | NA | NA |
| Orlando, FL MSA | NA | NA | 4,252,000 | 1.70% | 10.00% | 11.30% | 11.30% | 2.31 | 76,196 |
| Philadelphia PMSA | NA | NA | NA | 2.80% | NA | NA | NA | 0.45 | 53,429 |
| Pittsburgh, PA MSA | NA | NA | NA | NA | NA | NA | NA | 0.92 | NA |
| Raleigh-Durham-Chapel Hill, NC MSA | NA | 800,000 | NA | NA | 3.70% | 3.90% | NA | NA | 53,472 |
| Richmond-Petersburg, VA MSA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tampa-St. Petersburg-Clearwater, FL MSA | 1,300,000 | 1,100,000 | 1,700,000 | -1.70% | NA | 9.00% | 8.10% | 1.91 | 99,186 |
| Wash-Baltimore, MD PMSA | NA | NA | NA | NA | NA | NA | NA | 1.23 | NA |

**Table 2.5.2- Vacancy Rates and Rents by Type of Retail Market in the Target Cities in the American East**

| Name of Area | Downtown | | | | Community Services Centres | | | Power Centres | | | Regional Centres | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Upper Rent | Average Rent | Vacancy Rate | Upper Rent | Average Rent | Vacancy Rate | Upper Rent | Average Rent | Vacancy Rate | Upper Rent | Average Rent | Vacancy Rate |
| ***Southeast*** | | | | | | | | | | | | |
| Miami | $80.00 | $75.00 | 5.00% | $23.00 | $19.00 | 10.00% | $25.00 | $20.00 | 7.00% | NA | NA | NA |
| Orlando | $35.00 | $30.00 | 15.00% | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tampa | $30.00 | $21.00 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Fort Lauderdale | $26.00 | $19.00 | 8.00% | $18.00 | $13.00 | 10.00% | $45.00 | $32.00 | 10.00% | $20.00 | $15.00 | 10.00% |
| Charlotte | $25.00 | $18.00 | 6.80% | $18.00 | $16.00 | 8.70% | $30.00 | $22.00 | 2.00% | $40.00 | $30.00 | 1.90% |
| Jacksonville | NA | NA | NA | NA | NA | NA | NA | NA | NA | $60.00 | $3500 | 10.00% |
| Palm Beach | NA | NA | NA | $26.00 | $19.00 | 14.50% | $30.00 | $25.00 | 6.30% | NA | NA | NA |
| Charleston, SC | $70.00 | $35.00 | NA | $20.00 | $16.00 | NA | NA | NA | NA | NA | NA | NA |
| ***Northeast*** | | | | | | | | | | | | |
| Manhattan | $550.00 | $135.00 | 5.00% | $125.00 | $93.50 | NA | NA | NA | NA | NA | NA | NA |
| Boston | $120.00 | $40.00 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Washington | $80.00 | $51.00 | 4.00% | $40.00 | $29.00 | 3.00% | $40.00 | $30.00 | 1.00% | $90.00 | $62.50 | 1.00% |
| Philadelphia | $60.00 | $25.00 | 8.00% | NA | NA | NA | $30.00 | $25.00 | 3.00% | NA | NA | NA |
| Pittsburgh | $50.00 | $22.50 | 6.00% | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Suburban Maryland | NA | NA | NA | $40.00 | NA | 8.00% | $55.00 | NA | 2.00% | $100.00 | NA | 11.00% |
| North-New Jersey | NA | NA | NA | $25.00 | $19.50 | 5.00% | NA | NA | NA | $80.00 | $50.00 | 3.00% |
| Long Island | $20.00 | $11.96 | 22.50% | $23.00 | $15.63 | 13.00% | $98.00 | $47.08 | 7.00% | $85.00 | $51.50 | 3.00% |
| Middlesex/Somerset | NA | NA | NA | NA | NA | NA | NA | NA | NA | $75.00 | $50.00 | 4.50% |
| Baltimore | $40.00 | NA | NA | $20.00 | NA | 6.30% | $30.00 | NA | 6% | NA | NA | NA |
| ***Midwest*** | | | | | | | | | | | | |
| Chicago | $250.00 | $39.00 | 1.50% | $35.00 | $18.00 | 6.00% | $35.00 | $18.00 | 6.00% | NA | NA | NA |
| Cleveland | $50.00 | $40.00 | 30.00% | NA | NA | NA | $30.00 | $15.00 | 7.20% | $80.00 | $40.00 | 5.73% |
| Indianapolis | $40.00 | $22.00 | 8.00% | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Minneapolis | $40.00 | NA | 8.10% | NA | NA | NA | NA | NA | NA | $80.00 | NA | 4.90% |
| Detroit | $34.00 | $13.00 | 13.00% | $25.00 | $12.00 | 6.70% | $30.00 | $18.50 | 5.80% | $66.00 | $32.00 | 12.30% |
| Milwaukee | NA | NA | NA | $27.00 | $16.50 | 5.30% | NA | NA | NA | NA | NA | NA |
| St. Louis | NA | NA | NA | $25.00 | $16.00 | 4.00% | $46.00 | $35.00 | 5.50% | NA | NA | NA |
| Kansas City | NA | NA | NA | NA | NA | NA | $30.00 | $15.00 | 5.00% | NA | NA | NA |
| Cincinnati | NA | NA | NA | NA | NA | NA | NA | NA | NA | $70.00 | $40.50 | NA |
| Columbus | $24.00 | $14.00 | 8.00% | $13.00 | $12.00 | 800.00% | $16.00 | $14.50 | 3.50% | $70.00 | $30.00 | 2.00% |

## 2.6 Metropolitan Market Ranking in the Hotel Sector

### 2.6.1 A Few Concepts

The operating risks for hotels are large: they have to be managed properly because this is a services investment highly susceptible to seasonal and cyclical factors. So much so that some place hotels among management enterprises rather than in a real estate category. Yet, without a doubt, the cyclical behaviour of hotel real estate has a real estate nature.

The revenue per available room (REVPAR) is the benchmark most used to measure the performance of the hotel sector. It combines the changes in occupancy and in the price of rooms and captures the interaction between these two variables and between the supply and demand.
REVPAR' = (average price per room * number of occupied rooms)/number of rooms supplied

***Comparisons with offices***

As mentioned, the office market and that of hotels have experienced two cycles of ten to twelve years, while the economy has experienced five cycles. It therefore seems that the offices and hotels are in a constant state of disequilibrium for the reasons already mentioned, primarily, the time lag between a project's initiation and completion. The development risk is therefore greater.

With styles and formats that are continually changing, hotels have a shorter service life than office buildings. The construction activity there since 1994 has consequently been stronger than in the office sector. The same applied in the case of the shopping centres, which had to reinvent themselves over the course of the last decade.

The performance of the hotel sector is more sensitive to general economic health than is the office sector, due especially to the rents that can vary in the very short term. A hotel room is a perishable good... Vacancy is a greater risk than in an office. On the other hand, it can also benefit from very short-term rent increases and arm itself against inflation. The demand volatility is therefore greater in the hotel sector than in the office sector.

### 2.6.2 Industry and Product Characteristics

***Industry***

Although the hotel industry is still fragmented, it is in full consolidation phase. This trend will continue because the companies are seeking control of all aspects of their costs. Moreover, certain hotels have improved their marketing and customer loyalty through associations with well known chains. The Internet is contributing to this evolution towards better cost and customer approach management.

***Product***

The hotel product is very segmented, price discrimination by client category in a same hotel is very strong and each segment reacts differently to the economic variables. We are mentioning a few segments for your guidance.

*Price segments*: Prestige (Ritz-Carlton, Four Seasons), First class (Hilton, Sheraton), High end (Delta, Radisson), Mid-range (Best Western, Holiday Inn), Economy (Howard Johnson, Budget); some with full meals.

*Location segments*: downtown, suburb, highway, airport, tourism regions

### 2.6.3 Current American Trends

In Table 2.6.1, we have highlighted some national data to illustrate the trends in the American hotel sector. The hotel domain is right at peak cycle: the demand for hotel rooms showed a 3.6% growth in 1999, but the occupancy rate has been decreasing since 1997, during which period the supply grew more than the demand. Nevertheless, the REVPAR continues the climb that has lasted since 1990. The growth in REVPAR has been decreasing from year to year since 1997. We note that such an upward cycle is usually followed by a downward cycle for a long period. "If the potential is increasing at 1% annually, how much longer is it going to be economically feasible to add rooms at 4%?"[23] The prospects in this building sector are therefore not very bright.

***Analysis by segment***

The supply has increased a great deal in the mid-scale segment without service. However, the market share for the demand did not follow this change in supply. Consequently, occupancy and total revenue share have decreased, but the revenue per room remained stable. In 1999, the consumers did not lower the prices they were prepared to pay for a hotel room, but, on the contrary, sought the most luxurious rooms. Demand growth intensified for first class and high-end hotels and decreased for the economy and mid-range segments. Demographics act in favour of this hotel occupation: the baby boomers now relieved of family responsibilities have the means to travel. With 20% of the share of total revenues, the first class segment benefited from the economic growth of the past decade.

Table 2.6.2 provides a few statistics on American vacation travellers. In fact, they account for 60% of all the travellers in the United States. Between 1988 and 1998, they grew by 41%, or nearly four times more than the population growth established at 11% for the same period. As mentioned in the shopping centre sector, shopping constitutes their favourite activity while travelling.

Several development projects for prestigious hotels (in Miami for example) are on the drawing tables. Similarly, the new Times Square and Grand Central Station developments in New York are fuelling the city's tourism attraction: 26 luxury hotels are planned there. What is more, "The luxury market will not be overbuilt until 2005 or 2007."[24] In fact, this market segment reacts more slowly to the economic cycles than does the economy class since the project development phases are longer. The high-end segment continues to post an important growth in supply. Financing for new projects by the major hotel chains is easier to obtain than in the other segments.

The mid-range segment with meals is the least performing of all the segments. The buildings are older and less efficient. The mid-range segment without meals is undergoing repositioning and restructuring. They are banking on operating efficiency. Occupancy and demand have followed the supply for the hotel rooms affiliated with chains. We have already mentioned that the household savings rate is at its lowest level. Consequently, there is a sense the trend will reverse in 2000. Just recently, occupancy and price per room in the economy segment seemed to be gaining ground.

We remark here that the suburban location is the one experiencing the strongest increases in supply, demand and revenues and the location alongside highways the strongest decline. Primarily small hotels with less than

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[23] Randall, A.S. and John, D.L., February 1999, *The U.S. Lodging Industry Today*, Cornell Hotel and Restaurant Administration Quarterly,

[24] HVS International, Investment Overview of the U.S. Lodging Industry,

75 rooms are being built.

### 2.6.4 Estimates and Analysis of the Results

*Estimates*

The characteristics of the metropolitan hotel markets are presented in the appendix. The data were derived from *Smith Travel Research*. Some 1999 data were not available for certain metropolitan areas. We could have estimated the future demand with a very sophisticated model integrating the percentage of tourists in hotels, the number of conventions, etc. This clarification effort was not worthwhile considering the weak growth anticipated in this sector.

In fact, the hotel sector did not seem sufficiently promising in general for its growth to constitute a discriminating factor in the choice of the ten metropolitan areas with a strong non-residential development potential. Moreover, we cannot tie the future demand for hotel rooms to the demand for office space in the regions that are not exclusively tourist.

The results of the potential indices are shown in Table 2.6.3. Construction *intensity* is measured by the construction in proportion to the inventory and by the metropolitan area's inventory per capita ranking. Demand is estimated by the number of bednights sold while the supply reflects the number of bednights available. The market equilibrium is evaluated by comparing growth in demand with growth in supply and also by examining the change in revenue per room (REVPAR) since 1996.

*Analysis of the results*

We will see that the market risk is greater in the tourist regions and in the small metropolitan areas. Hence, the very strong construction activity (higher inventory per capita) surrounding Disney in Orlando and the 1996 Olympic Games in Atlanta bring the inventory per capita to such a level that the hotel sector is highly vulnerable to the economic conditions. There they fear a supply to demand surplus. Even if Orlando continues to be a highly prized tourist site, it will be seen that REVPAR growth decreased considerably in 1999. A significant decline is feared in the demand in Miami as a result of the economic conditions in Latin America. We mention here that Salt Lake City will host the 2002 Olympic Games.

In contrast, the hotel markets with greater market depth and diversity are less risky: New York, Boston, Chicago and Washington are as much tourism and business destinations so that the market risk is very low. Furthermore, demand continues to outstrip supply in the cities of New York and Washington, where returns are protected by significant entry barriers. The costs of land acquisition and development there are very high. A few cities situated close to these large centres are experiencing an important hotel industry development. For example, the Newark airport plays a large role in the area's hotel sector. The REVPAR there is growing strongly. Chicago and Philadelphia saw good construction in 1998-99 and furthermore, the occupancy rates and REVPAR growth are not as healthy in 1999, just as in Boston moreover.

Construction in relation to inventory is a way of measuring the risk of increased supply. Fort Lauderdale, Charlotte, Baltimore, Columbus and Orlando were the most active in 1998. Supply is increasing more than demand in Baltimore and Fort Lauderdale, which is experiencing a growth downturn in REVPAR. Similarly, demand is decreasing in Norfolk and the REVPAR is declining in Greenville, Indianapolis, Jacksonville and Raleigh.

The cities where we learned that demand in 1999 was still large compared with supply are: Atlanta, Detroit, Tampa and Washington. Along with Miami, these cities experienced strong growth in their REVPAR in

1999. Charlotte and Columbus belong to the emerging economies (we were unable to obtain their data for 1999). With regard to growth, considering the behaviours of the vacationers we talked about above, one cannot avoid the following cities: Miami and its beaches, Orlando and Disney, Tampa, New York, Philadelphia and Atlantic City, Chicago and Atlanta.

The areas of Manhattan, Chicago, Washington, Baltimore, Miami/Fort Lauderdale, Orlando/Tampa, Columbus and Charlotte have been selected for the more detailed analysis in the next chapter.

| | Number of units | | % change | | Occupancy % | Average price per room | Revenue per room | | Total revenues | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Totals | Market shares | Supply | Demand | | | $ | % | in $M | Market shares | % |
| *All market segments* | | | | | | | | | | | |
| 1990 | 3.170.500 | | 3.40% | 2.10% | 63.60% | 58.24 | 37.02 | | 42,837.3 | | |
| 1997 | 3,543,000 | | 3.60% | 2.70% | 64.40% | 74.71 | 48.15 | 30.1% | 62.263.5 | | 45.3% |
| 1998 | 3,691,000 | | 4.20% | 3.20% | 63.90% | 78.04 | 49.83 | 3.5% | 67,132.4 | | 7.8% |
| 1999 | 3,846,000 | | 4.20% | 3.60% | 63.50% | 81.01 | 51.43 | 3.2% | 72,203.8 | | 7.6% |
| 2000 | 3,989,000 | | 3.70% | 2.90% | 63.00% | 83.85 | 52.81 | 2.7% | 76,886.6 | | 6.5% |
| *Prestige* | | | | | | | | | | | |
| 1990 | 30,300 | 1.0% | 20.10% | 19.30% | 66.40% | 145.92 | 96.9 | | 1,072.3 | 2.5% | |
| 1997 | 40,400 | 1.1% | 0.10% | 1.60% | 74.40% | 199.73 | 148.54 | 53.3% | 2,188.0 | 3.5% | 104.1% |
| 1998 | 41,300 | 1.1% | 2.30% | -0.10% | 72.60% | 216.36 | 157.17 | 5.8% | 2,368.1 | 3.5% | 8.2% |
| 1999 | 41,600 | 1.1% | 0.70% | 0.00% | 72.20% | 228.04 | 164.53 | 4.7% | 2,496.6 | 3.5% | 5.4% |
| 2000 | 43,000 | 1.1% | 3.40% | 2.00% | 71.20% | 239.44 | 170.42 | 3.6% | 2,675.0 | 3.5% | 7.1% |
| *First class* | | | | | | | | | | | |
| 1990 | 327,600 | 10.3% | 4.30% | 3.00% | 68.10% | 96.7 | 65.83 | | 7,872.7 | 18.4% | |
| 1997 | 366,100 | 10.3% | 1.80% | 2.00% | 73.60% | 126.6 | 93.2 | 41.6% | 1,2453.5 | 20.0% | 58.2% |
| 1998 | 381,100 | 10.3% | 4.10% | 2.00% | 72.10% | 134.35 | 96.91 | 4.0% | 1,3481.1 | 20.1% | 8.3% |
| 1999 | 399,500 | 10.4% | 4.80% | 5.00% | 72.20% | 137.71 | 99.49 | 2.7% | 14,507.2 | 20.1% | 7.6% |
| 2000 | 419,100 | 10.5% | 4.90% | 4.30% | 71.90% | 140.46 | 100.92 | 1.4% | 15,438.2 | 20.1% | 6.4% |
| *High end* | | | | | | | | | | | |
| 1990 | 185,400 | 5.8% | 9.70% | 9.00% | 64.20% | 66.74 | 42.82 | | 2,897.1 | 6.8% | |
| 1997 | 266,000 | 7.5% | 9.10% | 8.90% | 71.60% | 88.41 | 63.33 | 47.9% | 6,149.5 | 9.9% | 112.3% |
| 1998 | 291,500 | 7.9% | 9.60% | 7.60% | 70.30% | 92.89 | 65.35 | 3.2% | 6,953.5 | 10.4% | 13.1% |
| 1999 | 317,800 | 8.3% | 9.00% | 8.30% | 69.90% | 94.84 | 66.28 | 1.4% | 7,689.2 | 10.6% | 10.6% |
| 2000 | 345,300 | 8.7% | 8.60% | 9.30% | 70.30% | 95.79 | 67.35 | 1.6% | 8,488.5 | 11.0% | 10.4% |
| *Mid-range with meals* | | | | | | | | | | | |
| 1990 | 664,600 | 21.0% | 0.30% | -0.80% | 61.40% | 52.07 | 31.96 | | 7,751.7 | 18.1% | |
| 1997 | 665,700 | 18.8% | 0.30% | -0.70% | 62.00% | 64.61 | 40.08 | 25.4% | 9,738.6 | 15.6% | 25.6% |
| 1998 | 664,700 | 18.0% | -0.20% | -1.70% | 61.10% | 67.76 | 41.37 | 3.2% | 10,037.2 | 15.0% | 3.1% |
| 1999 | 664,200 | 17.3% | -0.10% | -0.80% | 60.60% | 70.2 | 42.54 | 2.8% | 10,314.2 | 14.3% | 2.8% |
| 2000 | 674,600 | 16.9% | 1.60% | 1.40% | 60.50% | 71.95 | 43.54 | 2.4% | 10,720.6 | 13.9% | 3.9% |
| *Mid-range without meals* | | | | | | | | | | | |
| 1990 | 139,800 | 4.4% | 16.80% | 16.20% | 66.20% | 43.35 | 28.71 | | 1,464.8 | 3.4% | |
| 1997 | 332,300 | 9.4% | 16.80% | 14.70% | 67.50% | 58.93 | 39.77 | 38.5% | 4,823.5 | 7.7% | 229.3% |
| 1998 | 383,000 | 10.4% | 15.30% | 13.70% | 66.60% | 61.89 | 41.20 | 3.6% | 5,760.5 | 8.6% | 19.4% |
| 1999 | 431,400 | 11.2% | 12.60% | 11.50% | 65.90% | 64.43 | 42.46 | 3.1% | 6,685.2 | 9.3% | 16.1% |
| 2000 | 466,200 | 11.7% | 8.10% | 7.70% | 65.70% | 66.88 | 43.92 | 3.4% | 7,472.8 | 9.7% | 11.8% |
| *Economy* | | | | | | | | | | | |
| 1990 | 463,700 | 14.6% | 8.80% | 7.80% | 61.50% | 36.61 | 22.51 | | 3,810.4 | 8.9% | |

**Table 2.6.2- A Few Facts about American Travellers**

| *Means of transportation* | |
|---|---|
| Automobiles | 80% |
| Airplanes | 17% |
| Bus | 2% |
| Trains | 1% |

| *Length of trip* | |
|---|---|
| Less than 1 night | 28% |
| 2 to 3 nights | 40% |
| 4 to 9 nights | 24% |
| 10 and over | 8% |
| Average | 4.6 nights |

| *Type of lodging* | |
|---|---|
| Hotels motels | 46% |
| Friends, family | 35% |
| Other | 19% |

| *Volume in millions of persons* | *1993* | *1998* | *93-98* |
|---|---|---|---|
| Total | 1,057.5 | 1,305 | 23.4% |
| 55 years and over | 182.7 | 252.1 | 38.0% |

*The most popular states in descending order*

| *The most visited* | *The largest travel spending* |
|---|---|
| California | California |
| Florida | Florida |
| Texas | New York |
| Pennsylvania | Texas |
| New York | Illinois |
| Georgia | Nevada |
| Ohio | Hawaii |
| North Carolina | New Jersey |
| Illinois | Pennsylvania |
| New Jersey | Georgia |

Source: Travel Industry Association, National Travel Survey, 1999

**Table 2.6.3- Evaluation of the Hotel Market**

| | Activity | | Intensity | | Equilibrium | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Construction | | Per capita inventory (rank) | Construction as a % of inventory | Demand – bednights sold | Demand/ Supply | REVPAR | | |
| | 1998 | 1999 | 1998 | 1998 | % 99-98 | % 99-98 | % 99-98 | % 98-97 | % 97-96 |
| Atlanta | 4,089 | 4,318 | 9 | 5.60% | 6.10% | 1.09 | 2,62% | 4.20% | -10.50% |
| Baltimore | | | 52 | 11.50% | 6.20% | 0.85 | 4,63% | 6.80% | 8.60% |
| Boston | 2,116 | NA | 46 | 6.10% | | | 1,32% | 6.90% | 12.60% |
| Charlotte | | | 16 | 12.30% | | | | 3.90% | 5.70% |
| Chicago | 4,155 | 2,936 | 43 | 6.00% | 3.00% | 0.75 | 2,88% | 7.20% | 9.00% |
| Cincinnati | | | 33 | 5.10% | | | | 0.70% | 2.20% |
| Cleveland | | | 48 | 6.80% | | | | 0.70% | 6.30% |
| Columbus | | | 31 | 8.30% | | | | 2.60% | 7.20% |
| Detroit | 495 | 1,675 | 54 | 1.50% | 7.60% | 1.52 | 8,63% | 5.30% | 5.20% |
| Fairfield-New Haven | | | 53 | 4.10% | | | | 6.70% | 9.70% |
| Fort Lauderdale | 3,029 | NA | 10 | 13.60% | | | | 0.70% | 11.30% |
| Greensboro | | | 32 | 7.30% | | | | 5.30% | 2.50% |
| Greenville | 634 | | 42 | 6.10% | | | | -2.50% | -5.30% |
| Hartford | | | 55 | 2.40% | | | | 8.60% | 8.70% |
| Indianapolis | | | 24 | 2.40% | | | | -0.30% | 2.80% |
| Jacksonville | 1,310 | | 12 | 7.00% | | | | -1.10% | 4.70% |
| Miami | 2,275 | 2,158 | 5 | 5.80% | 4.30% | 0.83 | 6.17% | 4.60% | 8.80% |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Milwaukee | | | 56 | 5.00% | | | | 4.60% | 4.90% |
| Nassau | | | 58 | 3.00% | | | | 13.20% | 10.60% |
| New York | 1,666 | | 50 | 2.50% | 3.00% | 0.81 | 3.14% | 9.90% | 12.70% |
| Newark | | | 47 | 0.00% | | | | 12.20% | 13.90% |
| Norfolk | 973 | | 21 | 3.00% | -0.20% | -0.09 | 1.97% | 7.00% | 5.50% |
| Orlando | 6,881 | 5,706 | 2 | 7.80% | 2.40% | 0.40 | -1.39% | 0.70% | 9.10% |
| Philadelphia | 1,153 | 3,024 | 51 | 3.80% | 9.40% | 0.98 | 1.49% | 4.80% | 10.50% |
| Pittsburgh | | | 49 | 2.70% | | | | 0.20% | -0.40% |
| Raleigh | 1,338 | | 17 | 7.80% | | | | -7.60% | 1.90% |
| Richmond | | | 30 | 4.70% | | | | 2.30% | 6.60% |
| Tampa | 2,056 | 1,476 | 22 | 5.90% | 5.20% | 1.30 | 5.93% | 3.60% | 10.70% |
| W. Palm | | | 6 | 4.20% | | | | 3.90% | 14.40% |
| Washington | 3,223 | | 13 | 4.70% | 5.60% | 1.4 | 6.33% | 6.70% | 10.10% |

## 2.7 Conclusion of Chapter II

Throughout the preceding analysis, we have highlighted the different risks involved in penetrating the American market. The entrepreneur will have to weigh the risks before choosing the penetration region.

By and large, the region's size has an impact on the risks. Demand volatility is greater in smaller regions and also in regions that are very specialized or dependent upon a single activity sector, such as the tourist regions. This volatility is just as important when there is abundant available land because then single-family homes become more affordable. In other words, the depth of the market is more important in the large cities. On the other hand, supply volatility is more important in the very large areas where production constraints are numerous. In fact, the construction timeframes are more important where land and labour are scarce and also where regulations are cumbersome.

The entrepreneur will also have to feel comfortable with the penetration region. Hence our earlier studies showed that several singles builders from both Ontario and Quebec chose the southeast region. We mention here that the economy in Florida is much more diversified than those of Georgia and the two Carolinas. In addition, the population is growing continuously there (1.5% per year) and this immigration helps expand the labour pool. This growth in the labour force makes it possible to draw the necessary resources from it. The economy is based on SMEs with less than 100 employees. The majority are involved in tourism. International trade is encouraged by a coastal location, a diversified population and sophisticated air operations. Because of tax incentives, interest in aerospace is growing. The most active retail markets are in Miami-Fort Lauderdale and further growth is expected in 2000. Personal income there has increased by 3% since 1996. The most active office and hotel markets are in Orlando-Tampa.

Cities also differ in personality. We have touched on this throughout the text because it seems important to us to look at them from this angle. Their economic growth dynamics differ greatly according to the economy's predominant sector. It must also be noted that the quality of life and a favourable business environment are increasingly becoming growth factors. We will speak more of this in the next chapter.

Thus, we find a large *international city*, which relies on the global economy. We are, of course, speaking about New York. Washington and Miami also have economies that rely, as it were, on international activity. For example, Miami depends on Latin America.

We also find *mature business centres with a traditional financial economic base*: Chicago and Tampa. Also *centres with a tourist nature*: Fort Lauderdale. As planned in the analysis proposal, we have not examined the *mature business centres with an industrial base*, such as Detroit.

We have spoken of the *cities with a technological propensity*. The large cities having made the technological conversion are New York, San Francisco, Boston and Washington. We have spoken of the *new cities*. They are smaller and emerging through their ability to capitalize on the new technologies. Under this heading we group: Columbus (varied), Greensboro (Research Triangle), Norfolk (call centres) Raleigh (Research Triangle), Charlotte (call and data processing centres) and Richmond (biotechnology).

The areas with potential according to the sector under study are grouped by size in Table 2.7. The letter *p* indicates areas with good potential. The areas for which we succeeded in obtaining more accurate reliable data are examined in the next chapter.

In accordance with the analysis proposal, we had anticipated putting together ten fact sheets on the residential sector and ten on the non-residential sector. We therefore had to make a choice. By and large, we have selected the areas that presented potential in more than one sector. In fact, we suspect a certain interdependence between the growth of the sectors and the areas. Furthermore, on the East Coast, we have given preference to the areas with a strong potential in the residential sector. This is why we have left out Detroit, Philadelphia, Atlanta, Cincinnati, Norfolk, Greensboro, Raleigh-Durham and Richmond. On the other hand, we kept Boston, in spite of its weak residential potential. And we kept Chicago and Norfolk in spite of their low non-residential potential. We have therefore put together 18 residential fact sheets and 11 non-residential fact sheets.

**Table 2.7 Metropolitan Areas with Potential Anticipated in the Sectors under Study (p)**

| | **Metropolitan municipalities selected** | **Pop 98** | **Anticipated Potential** | | | |
|---|---|---|---|---|---|---|
| | | | **Residential** | **Non-residential** | | |
| **EAST** | **Groupings with more than 3.7M inhabitants** | | | **Offices** | **Shops** | **Hotels** |
| | New York-North New Jersey-Long Island, NY-NJ-CT-PA CMSA | 20,124 | | | | |
| | New York-Manhattan | 8,650 | p | p | p | p |
| | New Jersey: North and Centre | 2,442 | p | p | p | |
| | Chicago-Gary-Kenosha, IL-IN-WI CMSA | 8,810 | p | | p | p |
| | Washington-Baltimore, DC-MD-VA-WV CMSA | 7,285 | | | | |
| | Washington | 4,674 | p | p | | p |
| | Baltimore | 2,484 | p | p | | |
| | Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA | 5,633 | | p | | |
| | Detroit-Ann Arbor-Flint, MI CMSA | 5,458 | | | | p |
| | Philadelphia PMSA | 4,947 | | | | p |
| | Atlanta, GA MSA | 3,746 | | | | p |
| | **Groupings with 2 to 3.7M inhabitants** | | | | | |
| | Miami-Fort Lauderdale, FL CMSA | 3,656 | p | p | p | p |
| | Tampa- MSA and Orlando-MSA | 3,761 | | p | p | p |
| | **Groupings with less than 2M inhabitants** | | | | | |
| | Cincinnati-Hamilton, OH-KY-IN CMSA | 1,948 | | | p | |
| | Norfolk-Virginia Beach-Newport News, VA-NC MSA | 1,542 | p | | | |
| | Columbus, OH MSA | 1,470 | p | p | | |
| | Charlotte-Gastonia-Rock Hill, NC-SC MSA | 1,383 | p | p | p | |
| | Greensboro-Winston-Salem-High Point, NC MSA | 1,168 | | p | | |
| | Raleigh-Durham-Chapel Hill, NC MSA | 1,080 | | p | | |
| | Richmond-Petersburg, VA MSA | 957 | | p | | |
| **BALANCE** | | | | | | |
| | **Groupings with more than 3.7M inhabitants** | | | | | |
| | San Francisco-Oakland-San Jose, CA CMSA | 6,816 | | | | |
| | San Jose, CA PMSA | 1,641 | p | | | |
| | Dallas-Fort Worth, TX CMSA | | | | | |
| | Fort Worth-Arlington TX PMSA | 1,593 | p | | | |
| | **Groupings with 2 to 3.7M inhabitants** | | | | | |
| | Seattle-Tacoma-Bremerton, WA CMSA | 3,424 | p | | | |
| | Minneapolis-St Paul, MN-WI MSA | 2,831 | p | | | |
| | Denver-Boulder-Greeley, CO CMSA | 2,365 | p | | | |
| | Portland-Salem, OR-WA CMSA | 2,149 | p | | | |
| | San Diego, CA MSA | 2,781 | p | | | |
| | **Groupings with less than 2M inhabitants** | | | | | |
| | Austin-San Marcos, TX MSA | 1,106 | p | | | |

# III- SPECIFICS FOR PENETRATING THE MARKETS

## 3.1 Entry Barriers and Means for Overcoming Them

We are reviewing the issues concerning access to products, labour and financing and we will then see the factors that are under the exporter's control.

### 3.1.1 Barriers Stemming from the Market

The expansion of activities into the United States requires new strategies, new means of action. The American market differs from the Canadian market more than some people believe.

#### Production and Products

***Material availability and costs***

New plants are being built to manufacture gypsum and bricks, which somewhat reduces the impact of the shortages in these materials. Some shortages are also noted in cement and structural steel.

*Gypsum*: "The chronic shortage in wallboard has reached major proportions in some areas of the country. Every home remodel project or new home needs drywall but the manufacturers can't keep up with demand, according to U.S. Gypsum, the largest wallboard producer. Demand has increased 34 percent in the remodelling industry alone over the past five years." [25] The national gypsum demand totals one billion square feet. Delivery schedules have increased from 48 hours to one month. The prices rose from $9 in 1998, to $11 in 1999 to $14 in 2000.

*Bricks*: "If you are noticing more rock and stucco homes and buildings being built these days than you used to -- it's not your imagination. In the face of a nationwide brick shortage, residential and commercial builders are turning to other materials for the outer layer of their newest projects."[26]

*Cement*: Innovative work strategies and schedules must be developed to counteract the critical cement shortage and reduce the negative impacts of the delivery schedules and costs.

*Structural steel*: "Due to recent governmental changes restricting the volume of imported steel from markets in Asia, Europe and South America, and due to the limited number of domestic plants producing structural steel shapes, the construction market is currently experiencing higher prices and longer lead-times. As an example, the cost for rolled structural steel shapes has risen approximately 15% - 25% since last fall."[27] The orders are placed in the pre-construction phase.

The most dynamic builders maintain very open lines of communication and very close relations with their suppliers. The largest builders can allow themselves to place and finance large orders in advance. The smallest builders are the ones who experience the most shortages.

Similarly, there is greater openness to using new construction materials and methods that save time and labour. For example, "The new autoclaved, aerated concrete (AAC) is a lightweight, self-insulating material that will not rot or warp, is fireproof, impervious to insects and virtually soundproof. This project was originally designed around CMU (concrete masonry units), but getting enough masons necessary to do the scope of this project, and in the time we had, was unrealistic."[28]

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[25] *Shortages Stall New Home Construction*, July 99, AHA, the American Homeowners Association.

[26] Waldron, J. F. April 2000, *Construction Delays Stack up as Builders Deal with Brick Shortages*, Focus: Construction, Design & Development.

[27] The McShane Company, January 2000, *Newsletter*, Volume 3, Issue 1.

### *Customs duties: The free trade agreements in practice*

The end of this millennium was marked by agreements to facilitate trade between countries: Canada is thus affected by the FTA, NAFTA and WTO agreements. The gradual disappearance of tariffs between Canada and the United States is continuing in line with the provisions of the Free Trade Agreement (FTA) signed by these two countries. These elimination schedules are not the same as those affected by the provisions of the North American Free Trade Agreement (NAFTA) signed by Canada, the United States and Mexico. Furthermore, under the terms of the World Trade Organization agreements (the WTO agreements replace the General Agreements on Tariffs and Trade), over a ten-year period that commenced on January 1, 1995,[29] the United States, the European Union, Japan and Korea will be eliminating many obstacles, rules and procedures that hinder trade.

On the other hand, in practice, these agreements do not guarantee free trade. Thus, some state that the customs duties on construction materials had never been high and, consequently, NAFTA has little effect. Second, the majority of exporters complain about the volume of paperwork that must be completed when they want to sell to the United States. It is important that Canadian companies determine the at-the-border cost of their products, without forgetting the transportation charges, the export credit insurance, the brokerage fees, etc. and that they convert the price into American dollars. In the third place, although the multilateral negotiations have allowed reducing tariffs in many markets, various forms of non-tariff obstacles still exist, which hinder expanding trade with the United States. For example, in various sectors (softwoods, publishing, etc.) we hear allegations of subsidies that are unethical towards Canadian enterprises.

### *National purchase program*

Moreover, the *Buy America* clauses are still an important problem. The restrictions in this program are aimed primarily at the projects financed by the Federal Department of Transport. The funds are granted on the condition that a major portion, if not all, of the content is American. It is possible to use non-American components on the condition that dispensation is obtained from the administration involved within the Department of Transport. The primary contractor must request this dispensation right from the initial stages of the process.[30]

### *Product imports*

There are requirements in terms of marking, labelling and certification. Some advice on this matter can be obtained from the American Consulate or customs brokers. The United States requires that imported products bear marks indicating the country of origin. Improperly labelled merchandise risks being detained at the border.[31]

In the case of importing Canadian products, the project architects must know the products and already have the documentation to answer any request regarding compliance with the standards. In passing, we note that approved laboratories can certify that a product meets the standards of the three NAFTA countries.[32] We nevertheless recommend that the interested parties become members of the specialized authorized association and have the imported product certified by it. It is necessary to accept modifying one's products so that they meet local regulations or preferences. Similarly, a product not accompanied by an after-sales service bond may, in short order, earn a bad reputation likely to damage future sales. A recent study by CMHC presents a much more thorough review of the opportunities and means for exporting Canadian materials to the United States.[33]

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[28] Lewis, C. January 2000, *New building material gains ground in Florida,* Business Journal of Tampa Bay.

[29] The NAFTA Trade Information Center at (202) 482-0543 can answer questions. Similarly, the NAFTA Fax Information Line is accessible 24 hours a day. The system contains more than 600 documents and decisions. From your own fax, call the Automated Fax Delivery System at (202) 927-1692 or 927-1694.

[30] For more information on the provisions of the Buy America program, contact the Canadian Embassy in Washington, DC at (202) 682-7746.

[31] For more information on marking, visit the following Web page: www.customs.treas.gov.

### *Building codes*

There is still no national building code in the United States. However, the building codes are more uniform than it appears. In actuality, the majority of the local codes are based on the three following models:

- National Building Code, managed by The Building Officials and Code Administrators International (BOCA), especially in the Northeast;
- Standard Building Codes, managed by The Southern Building Code Congress International (SBCCI), especially in the Southeast;
- The Uniform Building Code, managed by The International Conference of Building Officials (ICBO).

These three code models incorporate some of the technical standards developed by the national associations and agencies.[34,35] Furthermore, *The International Code Council* (ICC) is an association of these three organizations that tends to standardize these three models. Standardization is also evident state-wide. This standardization makes the codes stricter. Several states have already standardized the local codes.[36]

Business practices and culture, the interpretation of the codes, relationships with financial institutions and the consumers' attitudes vary locally. We note that many local governments, particularly in the Northeast and California, have adopted growth management policies that result in higher costs and limit the construction of new buildings. We will return more specifically to the business mentality of the local administrators in each region in the chapter on the detailed analysis of the metropolitan areas.

## The labour shortage

Employment in construction has grown by 5% per year in the past ten years. An annual increase of 1.3% is forecast for the next decade. By the end of 2000, a national shortage of 250,000 construction workers is expected.[37] And, this shortage is expected to last from five to ten years.

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[32] For more information, visit the following Web page: www.nahbrc.org/certif/import.htm.

[33] Starr, E and Drdla, R, 2000, *Housing Technologies in the United States, Opportunities for the Export of the Canadian Products and Services,* CMHC.

[34] If you require assistance finding your way around, do not hesitate to contact one of the following organizations:
UBC - Uniform Building Code, International Conference of Building Officials, 5360 So. Workman Mill Road, Whittier, CA 90601 at (562) 699-0541;
SBCCI - Standard Building Code, Southern Building Code Congress Intl, 900 Montclair Road, Birmingham, AL 35213 at (201) 591-1853;
BOCA National Building Code, Building Officials and Code Int'l Inc., 4051 Flossmoor Road, Country Club Hills, IL 60478, at (708) 799-2300;
NFPA - National Fire Prevention Assoc., P.O. Box 9101, Batterymarch Park, Quincy, MA 02269 at (617) 770-3000.

[35] A detailed list of all these standards organizations, test laboratories, inspection agencies, etc. can be found at the following Internet address: http://www.sbcci.org/links.htm.

[36] A Web site provides the details of each of the codes that govern a locality:
http://www.Buildingteam.com/codes/index.asp.

More than three-quarters of the sub-contractors in all of the trades report labour shortages in all corners of the country.[38] It is certain that the shortages are more severe where total construction is the strongest, in North Carolina for example. However, a shortage in one region cannot be expected to be filled by immigration from another region. The problem is national. Similarly, the literature review suggests specific shortages in electricians, carpenters and plumbers. The decline in unemployment in these categories was 1.7 times the average unemployment reduction in all of the job categories.

"Projects will be completed as contractors meet spot shortages with various short-term, and frequently expensive, solutions. One in four projects of member companies encountered cost overruns and/or schedule delays because of labor shortages. Adding to the difficulty of finding qualified workers was the increase in employee turnover. Companies that find the time to train workers typically do a better job at attracting and retaining workers."[39]

Consequently, on the one hand the sub-contractors raise the prices. "They are literally encountering some of the worst construction labor shortages in decades. Getting sub-contractors to commit to completing their trades by a specific date is becoming increasingly difficult. That is the reason you may see prices for new homes consistently on the rise."[40]

On the other hand, their labour force is of dubious quality and reliability, without counting that the average age of the qualified labour is 40 years. "Once workers tire, usually after four to five weeks of overtime, contractors are lucky to receive 40 hours worth of work for the 60 hours recorded on the time card."[41] The abnormal delivery schedules eat not only into the profit margins but also into the work quality. It is difficult to attract youths into trade schools because they are sucked into the computer sectors.

Furthermore, the demand is rising for an increasingly qualified labour force. For example: "This interactive approach to retail is placing more demands on contractors. Interactive displays such as climbing walls, fish tanks and streams, as well as sophisticated sound systems to attract younger consumers, require specialization on the part of contracting firms."[42]

At the present time, builders are trying to deliver the commitments made last year and cannot take advantage of current market opportunities. In this context, the largest companies, those with the most solid foundations, are coping the best. They attract quality labour by offering their employees advantageous employment conditions: stability, career guidance, profit sharing, etc.[43] Other builders use information technologies and videoconferencing to allow clients to connect directly with the on-site managers. This reduces the clients' travel time. Maintaining these good business relations will make it possible to capture any new avenue or opportunity.

### *Immigration*

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[37] Associated Builders and Contractors.

[38] National Center for Construction Education and Research.

[39] *Skilled Worker Shortage Plagues Industry, But Projects Continue With Little Disruption,* 1998, Construction Labor Report, Vol. 44, No. 2209, The Bureau of National Affairs Inc., Washington D.C.

[40] Closser, S. R. April 2000, *Hot economy keeps construction humming, Shortage of workers among top concerns,* Focus: Structures.

[41] Engineering New Record, 30 March 1999.

[42] Richards, G. Sept 99, *Building Costs on the Rise as Labor Shortages Mount,* Shopping Center World.

[43] Simanoff D. Jan 2000, *Labor shortages puts squeeze on construction.*

By filing an L-1 type visa application, foreigners can be admitted for the purpose of training or supervising American workers who carry out the construction work themselves. The after-sales service provisions of the *Free Trade Act* do not authorize Canadians to enter the United States to provide installation, repair or maintenance services that result in structural modifications to a building, but do provide authorization if such services do not entail construction work.[44] However, for some workers with unique and essential qualifications and for after-sales service, NAFTA allows the Canadian company to file a B-1 or H-2B type visa application in the event of a shortage in this type of labour in the United States.[45] You can, however, expect long and taxing procedures, especially for obtaining the H-2B visas. We note that we can export our labour by exporting prefabricated components that contain a larger national added value than the unfinished materials.

**Freedom of access to financial resources**

The United States does not enforce any currency control measures. Foreign importers or investors can bring foreign funds into the United States or borrow some. Foreigners are entirely at liberty to repatriate the capital and the profits. However, certain reporting requirements apply concerning payments or expenditures outside of the country.

Similarly, foreign investors are hit by no restriction affecting access to financing sources in the United States; neither are there any restrictions that apply to foreign investors wishing to invest in State securities and in American companies' debt obligations. The credit and payment maturities are usually from 30 to 60 days, the open account being the most common method.

The Tax Treaty between Canada and the United States, signed on January 1, 1996, stipulates that the United States cannot tax the incomes earned by Canadians unless these incomes are large enough to reflect a stable establishment or permanent residence. In this Treaty, a stable establishment is defined as including a stable office or place of business or as the fact of having an employee in the United States, who usually possesses the authority in the United States to finalize contracts on behalf of the company. The supplementary taxes applying to companies and individuals, which may affect a Canadian company with a stable establishment in the United States and some employees who work in the United States, are the following: taxes on subsidiaries, estate taxes and gift taxes and withholding taxes on interest, dividends and licence fees.

The American government offers no special incentive to attract foreign investors. However, the same taxes and incentives that apply to the national enterprises are also offered to foreign companies that set up in the United States or acquire a company there.

### 3.1.2 Barriers Stemming from the Exporter

In general, all that is needed to succeed is enough flexibility to follow the local culture and business practices and to use the right combination of networking and marketing techniques.

**Following the local mentality**

The worst mistake made by all types of exporters is thinking that the work model adopted in the domestic market can be directly transposed to the American market and, even worse, to each of the regions of the American market. "Clearly, no easy, one-size-fits-all approach can ensure North American site selection success. The idea of entering new markets worth billions of dollars in revenue has generated pervasive optimism, enthusiasm and investment capital, but that hype is gradually being tempered by the realization of how complex, expensive and time-consuming those ventures can be."[46] The exporter must know his market, try to obtain all of the studies and information that are already available, know the regulations, know how to make a quote and a proposal, promote his product with insight, ensure that he provides after-sales service …

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[44] Grasmick J. 1998, *Exporting Canadian Construction Services to the USA - The Immigration Angle.*

[45] Canadian Home Builders' Association, Canadian Manufactured Housing Institute with CMHC, 2000, *Guide to the Rules under NAFTA and US immigration Law for Canadian Companies in the Housing Renovation and Residential Construction Sector.*

Generally speaking, Americans are practical. They want to know what advantages they can obtain from a deal in dollars and cents. For American business persons, time is money. One must be prepared to act the same day, or at least to provide an answer within 24 hours. Americans finalize deals quickly. If the exporter wants his initial project to contribute to actively promoting his skill, he must comply with the American performance evaluation criteria to promote his project. Difficult negotiations are to be expected.

The United States private sector is much more protective of its distance from the government. The suppliers, partners and clients have to be approached with creative business thinking. Too obvious support from the government of Canada may be considered a negative rather than a positive element.

The new exporters should concentrate their efforts in only one geographic region. Once they have succeeded in establishing themselves in that region, they will be able to start working in another selected geographic region.

For maximum success, each local market must be handled in a special fashion. A product and a sales technique that succeed in one market will not automatically do so in another. The business culture varies locally. It will be necessary to build bridges to benefit from the opportunities offered. The Americans are rather protectionist and prefer to do business with entrepreneurs with whom they have already established mutual trust during frequent meetings. Self-promotion in specialized publications is essential as is acquiring visibility, whether through periodic visits or projects. It is necessary to be prepared to carry out aggressive and comparative advertising. Care must be taken to translate all of the documents pertaining to the sale, service and warranty by using words and dimensions understandable at the local level.

### Endurance of the commitment

An inadequate commitment is noted on the part of senior management to invest the resources required for exporting. In fact, more time and energy must always be devoted to it than anticipated. Furthermore, if solid foundations are successfully established, the benefits stemming from them are felt much later than expected. But it is necessary to persist because everyone says the benefits are then higher than expected. Once the basis for profitable operations and growth is established, it must be nourished. Many companies turn to exports when their domestic market shrinks. If their domestic market recovers vitality or the exchange rate becomes less advantageous, they tend to neglect the export market. This mistake can harm the business of the representatives, the company or the American partners to such an extent that all of the work to penetrate the American market must be carried out again. Moreover, the exporter's skills must be updated.

### Investment in networks

One of the best ways to penetrate the market consists of establishing a network of professional alliances in different cities. With the help of this kind of network, companies can sound each other out to examine the potential business opportunities and they can learn to know the specifics of the regulatory context in different local markets.

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[46] Gaik W. and Jack Lyne, 1999, *Locating in North America: A Site Selection Primer*, Site Selection Magazine.

***Strength of the services providers***

Often, Canadian companies do not obtain advice from competent people. The exporter must clearly define his objectives and the obstacles he is likely to encounter. He must anticipate the possibility of hiring the services of an American company for management, financing research, etc. By forming relations in this way with some suppliers, he multiplies his chances of finding good sub-contractors. The choice of each sub-contractor in the United States is critical. They are very independent. To preserve its reputation and corporate identity, the Canadian company must perform a personal evaluation of the sub-contractor: his mode of operation, his reputation in the market, his employee management methods. The company must ensure that it clearly identifies the personnel that will be assigned to its project by the sub-contractor.

***Strength of the partnership***

Two means of surmounting the obstacle that the competition represents consist of forming a joint venture with an American company or buying one.

A good contact network is the best means for finding companies likely to want to form a joint venture. To form this network and discover some potential partners, it is in the exporters' interest to participate in trade shows and meetings to encourage the exchange of information. Many American companies that sell their services in Canada have established alliances this way with Canadian companies, while on American soil, they play the role of contact point for some Canadian companies. Several Quebec entrepreneurs do not wish to grant joint venture agreements. Yet a joint venture makes it possible to have access to additional capital and skills.

Certain Canadian companies have set up in the United States by buying an American company. They then presented themselves to potential clients as an American company. Although it is hard to make oneself known and establish one's reputation in a market, this often opens doors. The Canadian companies that have their own (100 %) sales people, representatives and offices in the United States are, generally speaking, those that succeed.

### 3.1.3 Conclusion

Import restrictions and a lack of human resources can cause numerous Canadian companies to give up on exporting to the United States. As for the financial resources constraints, we will devote a full section to them in the coming pages to properly illustrate how to overcome this barrier.

The American market has everything needed for growth and a company that does not ensure its growth slowly fades away. Within this context, the greatest entry barriers basically stem from the endurance of the exporter's commitment to conquer this market and, consequently, are under the exporter's control.

## 3.2 Real Estate Financing in the United States

Real estate financing is without a doubt a decisive phase in the real estate development process. Thus it is worthwhile devoting part of this study to the characteristics of the financing markets in the United States and to underscore in passing what distinguishes them from the Canadian practices. This section will attempt to summarize the essential statements pertaining to financing, and more especially:

- an overview of the United States real estate financing data, i.e., the size of the market and the principal players;
- the typical grid of the underwriting criteria normally required in the United States;
- the role of financial intermediaries and agents;

. the best presentation for a financing application;
. the importance of partnerships; and
. the main observations.

### 3.2.1 Data on Financing in the United States

In order to again grasp the size of the American market, Table 3.2.1 indicates the construction volume in the United States and Table 3.2.2, the total credits approved in the United States in 1999.

***The American construction market***

For guidance, the following Table 3.2.1 presents the change in the value of private (residential and non-residential) and public building construction in the United States between 1994 and 1998, in order to show the size of the American market.

Furthermore, according to the last monthly *U.S. Census Bureau* report (December 1999), the value of private residential construction was $240.4 billion in 1999, or an increase of 27% between 1994 and 1998 and 12% in 1999. For its part, private non-residential construction experienced weaker growth in 1999, up by 1% in relation to 1998, after having grown 51% between 1994 and 1998.

### Table 3.2.1[47] Construction Value by Type of Building

| Types of Construction | 1994<br>($millions) | 1998<br>($millions) | Change<br>1994-1998 |
|---|---|---|---|
| **Private construction** | | | |
| ***Residential buildings*** | 167,919 | 213,999 | + 27 % |
| 1 dwelling | 153,838 | 189,453 | + 23 % |
| 2 dwellings or more | 14,081 | 24,457 | + 74 % |
| ***Non-residential buildings*** | 120,285 | 181,915 | + 51 % |
| Industrial | 28,947 | 32,270 | + 11 % |
| Offices | 22,178 | 41,541 | + 87 % |
| Hotels | 4,648 | 14,904 | +221% |
| Commercial | 37,551 | 53,783 | + 43 % |
| Churches | 3,889 | 6,729 | + 74 % |
| Private schools | 4,822 | 9,629 | +100 % |
| Private hospitals | 12,268 | 13,683 | + 11 % |
| Others | 6,002 | 9,395 | + 57 % |
| **Public construction** | | | |
| Buildings | 49,448 | 66,137 | + 34 % |
| Schools | 20,361 | 29,916 | + 47 % |
| Hospitals | 3,951 | 3,978 | + 1 % |
| Residential | 3,835 | 4,047 | + 5 % |
| Industrial | 1,465 | 1,012 | - 31 % |
| Others | 19,834 | 27,183 | + 37 % |

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[47] U.S. Census Bureau.

### *Volume of real estate financing and main players*

With more than 250 million inhabitants and an economy in full expansion, the volume of the American real estate financing market is more than impressive. As proof, according to the *Federal Reserve* bulletin, the American institutions financed mortgage loans of more than $6 trillion for the year 1999, or a 31% increase as compared with 1995. To present a comprehensive picture of the situation, Table 3.2.2 presents the change in the volume of mortgage loans in the United States between 1995 and 1999 by type of lender and type of construction.

Regarding the distribution of these mortgage loans by main types of construction, the financing of residential real estate with one to four dwellings represents 75% of the market, followed in order by non-residential buildings (17%), multiple housing projects with five and more units (6%) and lastly, farm buildings (2%).

With such an extensive real estate financing volume, it goes without saying that a multitude of players and intermediaries can be found in it.

Globally speaking, the American real estate financing market is shared, in order of size, between the mortgage groups and trusts (48%), major financial institutions (37%), other lenders (pension funds, real estate investment trusts (REITs), etc.) (10%) and the federal government agencies (5%).

However, concerning the financing of the five-unit and over multiple housing sector, the market is divided differently since the major financial institutions finance 40% of the mortgage loan volume.

In this group, the most active in the sector are the commercial banks (16%) and the savings banks (16%), followed by life insurance companies (8%). It should be noted that in the past four years, the savings banks have leaned towards a lower presence in the multiple housing financing sector.

The mortgage groups and trusts (29%) constitute the other large players in terms of the financing volume for the five-unit and over multiple housing sector. Moreover, since 1995 they have been the financial players increasingly present in the sector with a rapidly growing market share (+ 145%).

Lastly, this sector's financing is divided between the other lenders: pension funds, real estate investment trusts (REITs), etc. (21%) and the federal government agencies (10%).

As can be seen, this is a vast market with multiple sources and it follows that there is keen competition between the players to secure the financing of the projects. Here we face a significant contrast to the Canadian markets that are substantially more limited, more demanding and less competitive.

To illustrate the difference, we note simply that a good development project in the United States will be courted by a half a dozen lenders competing through the quality and reliability of their services. The real estate financing markets are totally opposite for three fundamental reasons:

**Table 3.2.2** [48] **Volume of Mortgage Loans in the United States - 1995 and 1999**

| Types of Lenders and Construction | 1995 | 1999 | Change |
|---|---|---|---|
| | ($millions) | ($millions) | 1995-1999 |
| **All lenders** | 4,603,384 | 6,013,592 | + 31% |
| **By type of construction** | | | |
| Residential 1 to 4 units | 3,509,721 | 4,527,176 | + 29% |
| Multiple residential | 277,002 | 359,796 | + 30% |
| Non-residential | 732,100 | 1,026,903 | + 40% |
| Farms | 84,581 | 99,717 | + 18% |
| **By types of lenders** | | | |
| ***Major financial institutions*** | 1,900,089 | 2,243,008 | + 18% |
| ***Commercial banks*** | 1,090,189 | 1,361,947 | + 25% |
| Residential 1 to 4 units | 646,545 | 790,465 | + 22% |
| Multiple residential | 42,521 | 58,572 | + 38% |
| Non-residential | 377,293 | 482,367 | + 28% |
| Farms | 23,830 | 30,544 | + 30% |
| ***Savings banks*** | 596,763 | 658,383 | + 10% |
| Residential 1 to 4 units | 482,353 | 544,659 | + 13% |
| Multiple residential | 61,987 | 55,002 | - 10% |
| Non-residential | 52,135 | 58,279 | + 8% |
| Farms | 288 | 444 | + 54% |
| ***Life insurance companies*** | 213,137 | 224,677 | + 5% |
| Residential 1 to 4 units | 8,890 | 7,285 | - 18% |
| Multiple residential | 28,714 | 32,321 | + 14% |
| Non-residential | 165,876 | 173,106 | + 5% |
| Farms | 9,657 | 11,965 | + 24% |
| ***Federal government agencies*** | 308,757 | 288,235 | - 6% |
| Residential 1 a 4 units | 229,293 | 209,224 | - 9% |
| Multiple residential | 36,332 | 34,942 | - 4% |
| Non-residential | 10,156 | 7,898 | - 22% |
| Farms | 32,976 | 36,171 | + 10% |
| ***Mortgage groups and trusts*** | 1,863,210 | 2,861,430 | + 54% |
| Residential 1 to 4 units | 1,771,202 | 2,578,052 | + 48% |
| Multiple residential | 42,477 | 103,435 | + 145% |
| Non-residential | 49,527 | 179,942 | +265% |
| Farms | 4 | 1 | - 75% |
| ***Others*** [49] | 531,329 | 620,919 | + 17% |
| Residential 1 to 4 units | 371,440 | 397,491 | + 7% |
| Multiple residential | 64,970 | 75,524 | + 17% |
| Non-residential | 77,112 | 127,312 | + 65% |
| Farms | 17,806 | 20,592 | + 18% |

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48 Federal Reserve Bulletin, January 2000

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49 Pension funds, real estate investment trusts (REITs), financing companies, credit agencies

- The banks and the insurers are withdrawing from the financing markets, apart from the exceptions that we will mention further on;
- The pension funds are almost absent, apart, here too, from notable exceptions;
- The risk associated with real estate is considered too high, the memory of the 1990-1995 crisis still being present.

Of course, there are some exceptions. Loans on single-family residences are highly desirable since they entail a minimal risk; insured loans such as those of CMHC top the list of the desired products for obvious reasons and, lastly, any securitizable real estate financing raises interest. In a nutshell, the lowest risks.

The availability of loan capital in the United States opens significant possibilities for Canadian developers/exporters. Alone, there is no obstacle resulting from scarcity. However, to penetrate the market successfully, it is essential to approach the lenders with a credible and well written file. We will return to this.

### 3.2.2 Typical Underwriting Criteria

According to a survey conducted by the *Federal Deposit Insurance Corporation* (FDI) on some thirty American financial institutions, the following are the main underwriting criteria selected for evaluating real estate financing risk: pricing[50], capital required, guarantee of solvency, coverage ratio and lending value.

Because of the intense competition that exists between the different financial institutions, the real estate developers can secure more concessions from their mortgage lender, especially in terms of pricing.

Furthermore, due to a greater access to the financial market, the major real estate developers are typically offered some advantages and greater flexibility for their mortgage loans.

Although the mortgage lenders' main underwriting criterion in the 80s was the *collateral-based* concept, today, a much larger emphasis in the risk calculation is placed on the project's feasibility, the impact of the competing projects, the cash flow following construction and the capital required from the developer.

Notwithstanding these few shades of meaning, the impressive number of players and intermediaries in this vast public and private American real estate financing market and the intense competition reigning in the field ensure the real estate developers a wide range of financial advantages.

Table 3.2.3 sketches a broad picture of the American real estate credit market (commercial mortgages) by presenting the main typical underwriting criteria defined by the financial institutions according to several types of construction. Generally speaking, the real estate developers must expect to pay fees of 1 to 3% to the American financial institutions for their mortgage loans. This rate is calculated on the amount of the loan.

The great availability of capital and the keen competition engaged in by the lenders give broad negotiation margins to the borrowers. This is in particular contrast to the Canadian markets that demand much stricter underwriting criteria. For example, we will note that 80% of the loans granted in the United States are not accompanied by corporate or personal guarantees, while the Canadian markets require such supplemental guarantees even for a high proportion of the insured loans.

**Table 3.2.3[51] Broad Picture of the American Real Estate Credit Market**

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[50] Pricing: assessment of the sale price in relation to the market.

[51] January 2000 consultations with GE Capital Commercial Real Estate; see also *Real Estate Financing Resources* at http://cses.com/rental/financing_resources.htm and in *MGIC Underwriting Guides*.

| Type of construction | Coverage Ratio (minimum) | Value of Loan (maximum) | Spread | Term of Loan (years) |
|---|---|---|---|---|
| **Multiple residential** | 1.2 | 80% | 140-200 | 7, 10, 25 |
| **Commercial** | 1.25 | 80% | 160-215 | 7, 10 |
| **Industrial** | 1.3 | 80% | 160-205 | 7, 10 |
| **Offices** | 1.25 | 80% | 175-215 | 7, 10 |
| **Institutional** | 1.30 | 75% | 215-270 | 7, 10 |
| **Hotels** | 1.4 | 75% | 245-300 | 10 |

### 3.2.3 Role of the Financial Agents and Intermediaries

The financial agents and intermediaries industry is highly structured in the United States as opposed to Canada, where it is almost nonexistent. To properly grasp the role of the financial agents and intermediaries, it is worth defining each of their respective profiles.

The intermediaries are financing brokers with a vast network of contacts in the institutional community. Their interest is in securing a financing and earning a new business commission.

The financial agents are agents acting on behalf of a group of lenders and serving the applicant and the creditor at the same time. Typically, the member agents of the *Mortgage Bankers Association* are the best examples of this industry. The financial agent has a twofold interest, i.e.:

1. securing a financing and earning a new business commission;
2. syndicating a loan when necessary and retaining the management of the loan for, and on behalf of, the lenders.

By the very nature of their services, financial agents have a fiduciary responsibility towards the lenders. This leads them to act with the same reflexes as the lenders. They require complete files and make their own analyses before presenting the file to the lender. The financial agent's credibility depends on the thoroughness of his work.

In our opinion, the use of financial agents and intermediaries is amply justified. The commissions demanded, varying between 1% and 2% depending on the type of file, are recovered by the borrower in terms of efficiency and productivity.

There are many reasons justifying the use of financial agents and intermediaries. The most important are the following:

- up-to-date knowledge of the active lenders;
- ability to direct the right product to the appropriate lender;
- ability to identify where the best conditions are and to negotiate skilfully;
- to bring credibility to the file; and
- to develop an ongoing relationship for other projects.

As stressed earlier, there is a difference to be made at the outset between the nature of the service and the interlocutor (financial agent or intermediary). This can condition the approach and the negotiations.

### 3.2.4 Optimal Presentation of a Financing Application

Succeeding in the financing process for a real estate project depends largely on the communication tools used by the borrower in promoting his file to the financiers.

The objective of this section is to suggest a typical presentation form whose purpose is to:
- use a communication tool recognized by all of the financing players;
- demonstrate through the presentation the control the developer has of his product;
- summarize the information as a whole in a credible fashion.

The conspectus file presented on the next page sets out the essential characteristics sought by a lender. It goes without saying that other documents must accompany the file once the lender has shown an interest in proceeding further with the application. The accompanying documents for the synopsis file are the following:
- financial statements;
- drawings and specifications;
- advertising brochures on the applicant; and
- reference letters from local lenders.

Following this brief presentation, the information from each section is repeated on a separate page to provide more extensive details on each element of the presentation and to illustrate the means of calculating the financial ratios and profitability.

All things considered, the whole presentation will have a maximum of about fifteen pages and will provide a complete profile of the project, its merits and the loan application.

The presentation of a financing file must follow a very specific order to credibly illustrate the merits of the investment. It is obvious that there are some variations of this model, but taken globally, they all contain the same information.

## STANDARD FILE

FINANCING PROPOSAL
NAME OF PROJECT:
LOCATION:

| | |
|---|---|
| **1) The project:** | In a few sentences here, summarize the project subject to the financing (type, floors, number of units, ventilation, dedications, annexes, areas, parking, others). |
| **2) The location:** | Specify the location of the site, its area and its services characteristics (transportation, commercial services, schools, others). |
| **3) The development phases:** | Specify where the project is in its development process. Indicate the status of the municipal authorizations and the broad performance schedule. |
| **4) The market:** | Here, summarize the clientele the product addresses, the competition, the product differentiation offered, the marketing program and the expected results. (Normally, the preceding summary comes from a structured market study conducted by an independent and reputable firm. If such is the case, indicate the source). |
| **5) The financing required:** | Here, specify the nature and characteristics of the financing sought:<br>- temporary, permanent, both<br>- amount of the loan<br>- interest rate<br>- amortization, term |
| **6) The developer(s):** | Provide a brief description of the developer-applicant by emphasizing (i) the experience, (ii) the financial capacity, and (iii) the strategic alliances formed to ensure the project's success. |
| **7) The financial ratios:** | The financial objective is to illustrate at a glance the soundness of the financing, or put another way, to show the risks inherent in the financing application. The most important measurements are:<br>- project cost<br>- value after completion<br>- profit<br>- percentage of loan/value<br>- debt coverage ratio<br>- break-even<br>- sensitivity to input variations |
| **8) The project execution team:** | Local partners, architects, engineers, market analysts, marketing specialist. |

THE STANDARD FILE IS TO BE PRESENTED
IN 2 TO 3 PAGES.

*With the information presented, the lender already has a good summary that allows him to globally evaluate his interest.*

### 3.2.5 Importance of Partnerships

The immense American market is, without a doubt, the one that attracts the greatest number of investors, developers and manufacturers. All plans for growth outside the country of origin first go through a review of the American markets. There is therefore enough existing experience to state without hesitation that the best way to not succeed in penetrating into the United States is to go there alone.

The success in penetrating any foreign market lies in the identification of a compatible partner with the same economic interests.

The purpose of this report is not to expound on the approaches to take for identifying and forming a good partnership. We can nevertheless state that the successes obtained are not founded solely on sharing risks and profits. The successful partnerships are due more to the additional expertise brought by each partner to the partnership.

On a strictly financing level, a partnership with local expertise only facilitates things.

### 3.2.6 Main Observations

(i) The real estate financing markets in the United States abound in capital, are highly competitive and offer many flexible possibilities to entrepreneurs/borrowers;

(ii) The use of financial agents or intermediaries facilitates obtaining credit;

(iii) The best way to penetrate the American market or any other foreign market is to join forces with local partners;

(iv) Obtaining credit is not a major obstacle, to the extent that the conditions for credibility are put together in a file.

## 3.3 Thematic Facts Sheets on the Areas with Good Potential

### 3.3.1 Introduction

A review of the specialized press revealed several qualitative aspects in the growth of the pre-selected cities. Where should one set up? Everything depends, of course, on the risk-return ratio that the exporter is prepared assume. We therefore attempted to find the risks in each of the markets. Generally speaking, we considered that the intangible context to be grasped to ensure a sustainable establishment in a market is the *development equilibrium*. The equilibrium was difficult to demonstrate in many markets. Hence we are once again replacing the analysis in the global context of American economic conditions.

There is an over-supply of new office space in certain markets. Will they be absorbed by a year from now? The strength of the American economy continued to assert itself in 1999. Led by technology, the companies are experiencing continual productivity growth. And, capital was still cheap in 1999. However, May 2000 brought the sixth interest rate hike by the Federal Reserve since June 1999, adding up to 1.75% in one year. Are we at the end of the cycle? Many have already been predicting it for two years and it hasn't happened.

The non-residential space tenants now give a great deal of consideration to the location and amenities criteria of a building when deciding to rent, especially because of the blatant shortage of qualified labour in all of the markets. Non-residential development is therefore very closely related to residential development.

And also, of course, the building's technological infrastructure. The obsolescence of the existing buildings is accelerating, not counting the ongoing consolidations in all the sectors. But, there is a scarcity of good land and good sites and a rise in construction costs. The infrastructures are also aging and traffic congestion is increasing.

### 3.3.2 Construction of the Residential Fact Sheet

First of all, we put together a residential fact sheet, which it is shown on the next page. Here are the main blocks selected.

***Demographics***

The population growth of the 90s is indicative of the migratory movements we illustrated in the first chapter.

In the East, Orlando, Charlotte, Fort Lauderdale and the New York suburbs experienced good immigration. Orlando, just like Washington, receives young singles. Boston loses its families with children – because of the overly high housing cost – while Charlotte receives them. Florida and further north, just recently North Carolina, are havens for senior citizens. Chicago too is experiencing a need for housing for the elderly.

In the West, Austin is experiencing phenomenal immigration. Fort Worth, Seattle, Denver and Portland and San Diego are all high immigration regions. Portland receives primarily young families while single persons are concentrated in Austin. Elsewhere, the age groups are close to the American average.

***Local economy***

In general, the East Coast seems more welcoming to women than the West Coast.[52] This observation is important in the context of a balanced long-term growth, given the labour shortage and the growth in the number of women in the labour market.

On the East Coast, Florida is a choice state regarding job growth, the diversity of the economic base, the proportion of bachelors and the growth in professionals/managers.[53] This growth can be seen in the northern markets, in Orlando (which has the strongest job growth in America) and also in the south in Fort Lauderdale. The strength of the large international cities can also be seen – Washington/Baltimore and New York – which offer a very diversified economic base. However, in Washington as in Boston, the unemployment rate is too low and there is a labour shortage problem in spite of the fact that they contain the highest rate of bachelors and also the nation's strongest growth in professionals/managers, which bodes well for good potential future growth. In the small cities, Charlotte is the big winner.

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[52] Education Quotient, 1998, Expansion Mgt.

[53] Claritas Census Report, 1998.

# RESIDENTIAL

## LOCAL ECONOMY

Jobs: Growth and unemployment since 1997

Standard of living: Income and cost of living

Market risk: Diversity of the economic base

Growth potential: Proportion and growth in managers/bachelors

## DEMOGRAPHICS

Population growth in the 90s

Indication of migratory movements

Age group dynamics compared to the American average

## RESIDENTIAL MARKET

Development's location in the region

Estimates of unsatisfied housing needs in 1999

Housing cost in relation to median income:
  in renting
  in ownership

## BUSINESS ENVIRONMENT

Accessibility: By plane

Business climate: Unions
  Corporate taxes
  Attitudes of local administrators

Quality of life: Traffic congestion
  Pollution
  Level of culture
  Crime index
  Population diversity

## COMMENTS

Market's advantages and favourable opportunities

Threats and barriers to development in this market

On the West Coast, Austin is incontestably the strongest. But the job market is not as tight in Denver and Portland. And it is more diversified in San Jose and Fort Worth. Just like Seattle, all these cities contain a high proportion of bachelors.

***Business environment***

The areas' accessibility can be defined in several ways. The number of direct flights from the city was the criterion selected to qualify it. Actually, in the course of our interviews, some mentioned wanting to be posted to Atlanta because of the quantity of direct flights from its airport. Several, however, mentioned to us that the quantity of direct flights from Montreal was a selection criterion because of the numerous trips (two to three per week) a new set-up requires. The following table records the time required to go from Montreal to different areas in the American East.

**Table 3.3.1 – Flights from Montreal to Different Areas**

| City | Airport | Stopover | Trip length (hr:min) | No. flights/week |
|---|---|---|---|---|
| Boston | BOS | nil | 1:11 | 58 |
| New York | LGA + EWR + JFK | nil | 1:12 | 153 |
| Washington | IAD and DCA | nil | 1:40 | 33 |
| Chicago | ORD | nil | 2:09 | 62 |
| Orlando | MCO | nil | 3:04 | 2 |
| Fort Lauderdale | FLL | nil | 3:20 | 7 |
| Miami | MIA | nil | 3:29 | 14 |
| Tampa | TPA | nil | 3:30 | 2 |
| Raleigh | RDU | Ottawa | 3:37 | |
| Baltimore | BWI | Toronto | 3:40 | |
| Norfolk | ORF | Washington | 3:54 | |
| Charlotte | CLT | Toronto | 4:03 | |
| Columbus | CMH | Toronto | 4:03 | |
| Tampa | TPA | Toronto | 5:31 | |

We note here that these itineraries will change in October. Air Canada and Delta Air Lines announced the signing of a trade agreement providing for the operation of multiple-code North American flights and the expansion of services between the two airlines' hubs effective October 29, 2000. It replaces the trade agreement with American Airlines. This agreement completes that with United Airlines. The clients will benefit from better itinerary possibilities in the markets currently under-served by Air Canada, especially in the South-eastern United States. The agreement establishes links between the Delta hubs – Atlanta, Cincinnati, Salt Lake City and Dallas-Fort Worth – and the Air Canada network. Furthermore, travellers will be able to count on new links between Canada and the United States, since new lines should appear effective the next winter schedule.

The business climate is equally important. It will be noted that corporate taxes differ from state to state, Texas, Colorado and Florida being among the least costly, New York, Massachusetts and California among the most costly.[54] The municipal administrations were evaluated from several viewpoints: financial and human resources management, the use of information technology and the achievement of the anticipated results.[55]

An area's quality of life can attract skilled labour to it. *The quality of life is therefore a very important factor*

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[54] State Corporate Income Tax Burden, 1998, Development Report Card.

[55] City Grades at a Glance, 2000, The Government Performance Project, Congressional Quarterly, Inc.

*for an area's growth potential.* Traffic congestion is infernal in Washington, Chicago, Miami and Seattle.[56] Crime is still high in New York and Washington/Baltimore.[57] It is also a problem in Charlotte. The population diversity is significant in Miami, San Jose and Norfolk.[58]

***Residential market***

We noted the large, growing sub-areas in the chapter on the total residential construction. Speaking very generally, the multiple housing sector is larger in the American East than in the West. In the East, the cities of New York and Miami accept density better than Boston, Charlotte and Colombus. Similarly, in the West, San Jose and Austin accept density better than Portland and Denver.

In all, 342,000 multiple housing units were built in 1999, compared with 207,000 in 1997. At the present time, new construction is concentrated in luxury housing and senior citizens' homes. The luxury housing targets professionals without children. Housing for senior citizens seems over-abundant in the Southeast and this sector is highly competitive.

Studying the comparative housing costs makes it possible to foresee the most profitable type of construction in each of the areas.[59] The cost of ownership includes municipal taxes, mortgage interest deductions for income tax purposes (30 years, 7.25%), but excludes the equity cost and maintenance expenses. The cost of rental housing is given for a luxury apartment on the market. These costs are compared with the area's median income to properly indicate the accessibility and relative cost of occupancy. If the relative cost of ownership is more than 10% lower than the rental cost, the rental housing construction risk is increased. It is, in fact, obvious that the recent increase in interest rates favours rental housing, especially in the areas where the cost of ownership is affordable as compared with the median income.

According to this criterion, it would be profitable to build rental housing in Chicago, New Jersey Centre, Boston and New York in the East, and in San Francisco, Austin, and with greater risk Portland and Seattle, in the West.

It should be noted that the migratory movements are more abrupt and difficult to predict than changes in the supply. We know, for example, that growth in the technological sector has a very significant impact on them. To have some idea of the level of disequilibrium between supply and demand, we compared the number of absorbed and outdated units with the level of construction in each of the areas. It appears that the areas of Boston, New York, New Jersey and Miami/ Fort Lauderdale need new units. In the West, a supply-to-demand deficit is noted in San Jose, Fort Worth, Denver and San Diego.

***Comments and recent developments***

The advantages and drawbacks that we perceived in the course of our reading have been summarized in a few words to qualify the areas. They also indicate the nature of the informal entry barriers.

### 3.3.3 Construction of the Non-residential Fact Sheet

The blocks selected in the non-residential fact sheets may differ somewhat from city to city, depending on the strategic information we managed to collect. They are shown on the next page.

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[56] Texas Transportation Institute Analysis, 1997.

[57] BI Crime in the U.S., 1998 - Statistics Canada.

[58] Claritas Census Report, 1998.

[59] Ernst & Young and CB Richard Ellis.

***Office data by sub-sector***

This block basically indicates how the buildings are positioned in classes A and B in the downtown and in the suburbs. For each type of building, we provide the vacancy rate, construction, absorption, average rent and the outlooks for variation in sale price.[60]

***Office market***

We attempted to identify the most active sub-markets and the recent construction and projects. According to the availability of data, we therefore indicate the development dynamics observed in the downtown and the suburbs, the large corporations present in the area, the risk related to the supply-to-demand synchronization, the restrictive regulations and some indicators on the financing supply.

***Other market***

The hotel room supply and demand were defined separately in the most active markets.

The most active markets in the retail and industrial sectors were defined briefly.

***Local comments***

In this block, we spoke of the area's physical and business infrastructure. According to the data available, we indicate the alliances and claims by certain pressure groups, the attitude of the local government, the modifications to be anticipated in the economic base, the changes in certain neighbourhoods, the condition of the transportation, sewage and airport infrastructures. Some anecdotes may occasionally establish a bit of context.

---

[60] SIOR, 2000

# NON-RESIDENTIAL

### LOCAL COMMENTS

Economic climate and real estate context illustrated by some of the following different facts:

- Alliances and strength of certain pressure groups
- Impacts of the local government's attitude
- Modifications to the economic base
- Modifications to the infrastructure: airports, roads
- Changes in certain neighbourhoods: growth, availability of land, etc.

### OTHER MARKET

Industrial, hotels and/or retail

Change in demand and change in supply

### OFFICE MARKET

Development dynamics of the downtown and suburbs

Dynamics of the large corporations present in the area, new industries

Size of certain sub-markets

Recent construction, projects anticipated

Synchronization of the supply to demand: shortages, surpluses, absorption

Restrictive and facilitating regulations

Financing supply: source and costs

### OFFICE DATA IN 1999

Class A and Class B, downtown and suburbs:

Inventory, Vacancy rate, Vacant sublets, Under construction, Absorption, Outlook for sale price variation

### 3.3.4 Presentation of the Fact Sheets for Each of the Areas

We recall that the selection of the areas was based on a quantitative analysis. As a result of the qualitative analysis, however, the potential of certain areas may appear rather disappointing. This close-up look in fact shows some weaknesses that will not be acceptable to certain exporters. It is up to the reader to judge his comfort... The following areas are presented:

| East Coast | | West Coast |
|---|---|---|
| Baltimore | Miami-Fort Lauderdale | San Jose |
| Washington | Orlando-Tampa | Fort Worth |
| Boston | Charlotte | Seattle |
| New York-Manhattan | Norfolk | Minneapolis |
| New York-New Jersey | Columbus | Denver |
| Chicago | | Portland |
| | | San Diego |
| | | Austin |

# BALTIMORE

## RESIDENTIAL

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 2.3% | 1.90% | 1.70% | 2.,30% |
| Unemployment | 3.5% | 3.90% | 4.90% | 6.30% |

| | U. S. | Baltimore |
|---|---|---|
| Per capita income, 1998 | 21,653 | 22,217 |
| Cost of living index, 1999 | 111 | 117 |
| Business diversity index, 1998 | 18 | 13.3 |
| Level of venture capital, $B 1999 | 71 | 23 |
| % of female managers | 37.9% | 41.3% |
| % of bachelors, 1998 | 23.3% | 24.1% |
| Growth in profess./managers, 1998 | 0.3% | 1.6% |

### RESIDENTIAL MARKET

| Total Permits by Location | Distribution | 98-99 |
|---|---|---|
| Baltimore City | 0.11% | -47% |
| Anne Arundel Area | 12.42% | 3% |
| Annapolis | 0.40% | -41% |
| Baltimore County | 12.71% | 68% |
| Carroll County Area | 2.99% | 1% |
| Mount Airy | 0.52% | 81% |
| Harford County Area | 5.77% | 6% |
| Havre de Grace | 0.27% | 55% |
| Aberdeen | 0.15% | -43% |
| Bel Air | 0.08% | 350% |
| Howard County | 7.65% | 2% |
| Queen Anne's County Area | 1.41% | 20% |
| Queenstown | 0.06% | 86% |
| Downtown | 0.04% | 100% |

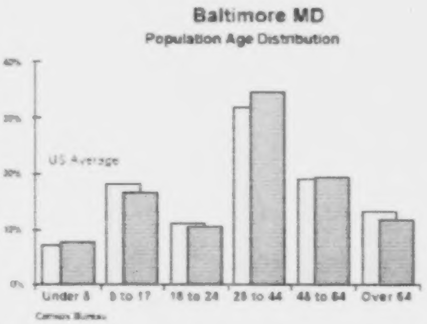
The 1999 supply-to-demand surplus is estimated at 0.6% of the inventory.

The cost of ownership is 4.7% lower than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 22.2
Renting: 23.3

### DEMOGRAPHICS

**Population Growth 93-00: 6.3%**



The population aged 25-44 is growing to the detriment o the adolescents. There is emigration from this area. The retail sector is stagnating.

*"Buyer interest in senior citizen oriented condominiums had picked up."*

### BUSINESS ENVIRONMENT

| | US | Baltimore |
|---|---|---|
| Number of direct flights, 1998 | 259 | 268 |
| Level of culture (best = 100) | 83.4 | 98.9 |
| Crime index, 1998 | 485 | 730 |
| Population diversity index, 1998 | 33 | 30 |
| % of unionized employees | 8.6% | 7.2% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 2.0% |
| Sound municipal management, 1999 | | B- |
| Traffic congestion, 1996 | 1.09 | 1.09 |
| No. of days of pollution | 10 | 17 |

### COMMENTS

**Advantages**: Good standard of living
Good labour quality
Highly developed health-related services sector
MBNA and Creditrust are planning the addition of more than 1,500 employees

**Drawbacks**: Economy very dependent upon the federal sector
Bureaucratic and cumbersome business environment compared with neighbouring areas
Residential sector too large: the families generate lower revenues than the companies but require great deal in municipal services

# BALTIMORE

## Non-residential

### ECONOMIC CLIMATE

*The Greater Baltimore Alliance* set itself a specific objective of attracting twenty major companies to the area: all the incentives combine to reach this objective. They are relying a location close to America's major markets and on the accessibility of a good pool of qualified labour. Job creation is good: 18,300 jobs were created in 1999.

### HOTELS

**Demand**

The famous aquarium, the expansion of the convention centre and the investment in the Baltimore/Washington International Airport seem to have been productive at the tourism level. The hotel market is doing well. Some other developments like the growth of the North Virginia technological sector, the football stadium and the Disney museum also have a positive impact on the demand.

**Supply**

Little new supply. However, some projects for 2,674 new rooms above the 6,163 currently available are on the drawing tables and ready to go as soon as the financing becomes more available: 600 Westin rooms, 750 at the Marriott Inner Harbour East, 850 a the Grand Hyatt, 207 at Marriott Courtyard and 267 Embassy suites.

### OFFICES

**Recent developments**

In the downtown, the Columbia sub-market is the most active. Furthermore, it contains 51% of the rentable space and 58% of the new construction.

In the suburbs, the construction of highway 100 linked Howard and Anne Arundel counties, which encourages the development of the Howard area surrounding the BWI airport. Overly strong construction is a worry in the Owings Mills sub-market.

**Financing Data**

Financing sources: Pension funds
Financing supply: Moderate
Capitalization rate: 9.5%-10.0%
Internal rate of return: 12.0%

### INDUSTRIES AND STORES

The industrial market is healthy. Will demand manage to absorb the new supply? Yes, because all the construction is pre-sold, turnkey. The major buyers are REITs. Activity in the Baltimore port is increasing.

In the retail store sector, the future supply pipeline is sufficient to satisfy the demand of the next two years. The annual demand is estimated at 450,000 sq. ft. and the projected supply is 509,315 sq. ft.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 7,431,399 | 8,600,624 | 6,204,918 | 17,302,000 |
| Vacant | 812,336 | 610,931 | 968,031 | 1,464,347 |
| Vacancy rate | 10.9% | 7.1% | 15.6% | 8.5% |
| Vacant sublets | N/A | N/A | N/A | N/A |
| Under construction | 0 | 709,500 | 41,000 | 694,776 |
| Net absorption | 251,092 | 528,195 | -247,546 | 2,000,128 |
| Weighted average rent | $26.00 | $22.50 | $17.00 | $19.00 |
| Outlook for sale price increase | 1-5% | 1-5% | 1-5% | 1-5% |

# WASHINGTON

## Residential and Stores

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 3.2% | 2.30% | 2.80% | 2.50% |
| Unemployment | 2.2% | 2.60% | 3.20% | 3.70% |

| | US | Washington |
|---|---|---|
| Per capita income, 1998 | 21,653 | 28,388 |
| Cost of living index, 1999 | 111 | 153 |
| Business diversity index, 1998 | 18 | 31.9 |
| Level of venture capital, $B 1999 | 71 | 63 |
| % of female managers | 37.9% | 44.5% |
| % of bachelors, 1998 | 23.3% | 37.0% |
| Growth in profess./managers | 0.3% | 4.5% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| District of Columbia | 3.19% | 151% |
| Montgomery County | 17.96% | -12% |
| Prince Georges County | 10.27% | -52% |
| Frederik county | 9.85% | 31% |
| Charles County | 5.50% | -21% |
| Calvert County | 4.16% | 17% |
| Fairfax County | 34.91% | 6% |
| Loudon County | 24.25% | 10% |
| Prince William County | 14.74% | 23% |
| Spotsylvania County | 6.29% | n/a |
| Stafford County | 5.58% | 7% |
| Alexandria | 4.29% | -17% |
| Berkeley County | 3.41% | 16% |
| Jefferson County | 2.05% | 26% |

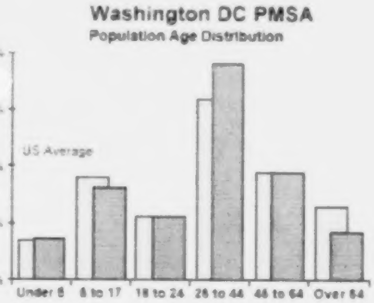
The 1999 supply-to-demand surplus is estimated at 0.6% of the inventory.

The rental cost is 6.7% higher than the cost of ownership. In 1998, the ratios of these costs to the median income were the following:

Ownership: 20.6
Renting: 22.0

### DEMOGRAPHICS

Population Growth 93-00: 10.1%



Census Bureau

The population over age 64 has been displaced in favour of that aged 25-44. There is therefore a large number of single persons with needs for small apartments in multi-family buildings. Apartments accounted for 28% o the new construction recently.

### STORES

Jobs in the retail sector grew slowly in 1999. The dynamics are changing however and a substantial improvement is forecast for 2000, especially in the Montgomery suburb at Germantown Center. Consumer spending has increased b 5% per year since 1997, especially in the downtown area. The most promising sectors are Stafford, Fairfax and Prince George.

### BUSINESS ENVIRONMENT

| | US | Washington |
|---|---|---|
| Number of direct flights, 1998 | 259 | 819 |
| Level of culture (best = 100) | 83.4 | 99.9 |
| Crime index, 1998 | 485 | 462.9 |
| Population diversity index, 1998 | 33 | 30 |
| % of unionized employees | 8.6% | 7.2% |
| Corporate taxes - % state revenues, 1999 | 3.1% | 1.7% |
| Sound municipal management, 1999 | | C+ |
| Traffic congestion, 1996 | 1.09 | 1.43 |
| No. of days of pollution | 10 | 10 |

### COMMENTS

| | |
|---|---|
| **Advantages**: | High per capita income: significant level of discretionary spending in the regional shopping centres.<br>Tourism<br>Large government-related business services sector (lawyers, lobbying…) that contributed to 25% of the growth in 1999 |
| **Drawbacks**: | Large transportation infrastructure problems, especially in the suburbs<br>High rental housing costs<br>Beginning of a shortage in qualified labour |

# WASHINGTON

## Non-residential

### Local Comments

The federal government's rationalization is coming to an end. The jobs associated with this sector (law firms) continue to be important there. About 66,000 jobs created in 1999 out of the 250,000 in the past five years.

The local government is stronger, with precise objectives for improving the city: the re-development of the downtown core, the reduction of the crime rate, the formation of the Downtown Business Improvement District and the opening of the MCI arena in 1997 are catalysts for strong, balanced development.

Prince William County sells land in its technology park at a lower price than the market value and facilitates obtaining permits there for the purpose of attracting a critical mass of technology companies. These efforts are succeeding: Ronbotics, Lockheed Martin, American Type Culture Collection have set up there.

### Hotel Market

**Demand**

The demand is somewhat dependent upon the Federal Congress schedule. However, the growth in office jobs and the 2 million sq. ft of commercial space anticipated in the coming years are fuelling the demand. Tourism there is also experiencing some prosperous years.

**Supply**

Initially, some outdated buildings were transformed into hotels (Courtyard by Marriott and Residence Inn). New hotels have been built around the international airport.

In 2000, Residence Inn and Hilton Garden Inn will be added. Moreover, a 300-room Ritz Carlton is planned. Numerous projects are on the drawing tables: Millenium Partners, 120 rooms in the Kimpton hotel, 472 rooms adjacent to the new convention centre, 550 additional rooms at the Renaissance.

Excessive development could, however, reduce occupancy before the construction of the convention centre.

### Office Market

**Downtown**

With 78.6 million sq. ft. of office space, the downtown market is the nation's fourth largest. Corporate demand has fuelled the construction of office buildings. The new 2.3 million sq. ft. convention centre, expected in 2003, and numerous head offices (U.S. Mint, American Public Health Association, Potomac Electric Power Company and Secret Service) are under construction.

The East End and Capitol Hill submarkets experienced large gains, primarily of class A buildings. In 1999, 1.1 million sq. ft. were delivered downtown and at the present time, there are 6.2 million under construction or renovation with 55% of this space already rented. The REITs are this market's important players. The major portion of the negative absorption affects class B and C buildings that are demolished/rebuilt or renovated to class A.

**Suburb**

In the suburbs, northern Virginia is experiencing spectacular immigration and growth because of the ease of conducting business there: 10 million sq. ft. built in 1999. The growth of the high technology sector there is convincing: the purchase of Time Warner by America Online will add jobs. The overly tight market in Montgomery displaces tenants to Prince George. A suburb of the new economy, its economic base is solid but its infrastructure is outdated. One million new sq. ft. are projected for 2000.

**Financing Data**

Financing sources: Commercial banks, REITs
Financing supply: Ample
Capitalization rate: 8.0-9.0%
Internal rate of return: 10.0-12.0%

### Office Data by Sub-sector, 1999

| | Downtown | | Northern Virginia | | Maryland | |
|---|---|---|---|---|---|---|
| | Class A | Class B | Class A | Class B | Class A | Class B |
| Total inventory | 47,458,855 | 41,352,260 | 59,165,739 | 57,605,411 | 25,094,994 | 40,847,078 |
| Vacant | 1,868,238 | 2,074,609 | 2,031,651 | 1,869,229 | 1,018,515 | 3,788,759 |
| Vacancy rate | 3.9% | 5.0% | 3.4% | 3.2% | 4.1% | 9.3% |
| Vacant sublets | 677,626 | 250,850 | 1,258,284 | 507,885 | 247,670 | 353,770 |
| Under construction | 4,346,326 | na | 69,835,110 | 330,232 | 2,394,641 | 450,580 |
| Net absorption | 1,842,654 | 254,209 | 6,272,101 | 537,826 | 831,067 | 299,480 |
| Weighted average rent | $39.90 | $31.16 | $27.46$ | $24.04 | $25.50 | $30.05 |
| Outlook for sale price increase | na | 1-5% | 6-10% | 6-10% | 1-5% | 1-5% |

# BOSTON

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 2.0% | 1.20% | 2.10% | 2.30% |
| Unemployment | 2.5% | 2.90% | 3.30% | 3.80% |

| | US | Boston |
|---|---|---|
| Per capita income, 1998 | 21,653 | 26,216 |
| Cost of living index, 1999 | 111 | 154 |
| Business diversity index, 1998 | 18 | 21.0 |
| Level of venture capital, $B 1999 | 71 | 480 |
| % of female managers | 37.9% | 40.5% |
| % of bachelors, 1998 | 23.3% | 32.6% |
| Growth in profess./managers | 0.3% | 2.0% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Boston | 25.22% | 17% |
| Tewksbury | 8.05% | 192% |
| Plymouth | 7.71% | -4% |
| Braintree | 7.05% | 838% |
| Franklin | 6.95% | -15% |
| Worcester | 6.86% | 29% |
| Shrewsbury | 6.61% | -7% |
| Salem | 5.58% | 41% |
| Peabody | 5.45% | 397% |
| Bedford | 5.23% | -17% |
| Manchester | 5.14% | -36% |
| Londonderry | 5.11% | -6% |
| Taunton | 5.04% | -9% |

The 1999 supply-to-demand deficit is estimated at 2,664 units.

The cost of ownership is 8.8% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

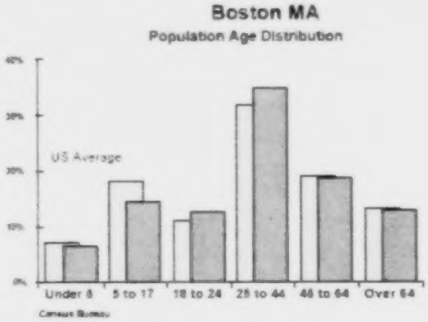
Ownership: 38.4

Renting: 35.3

The majority of the rental housing is situated in small wood and brick buildings.

### DEMOGRAPHICS

**Population Growth 93-00: 5.1%**



The population is grouped around the 18-44 year-olds, to the detriment of young children. The families with children are leaving the area because of overly high costs of living (of housing). In spite of the economy's good performance, we see an emigration of 15,000 persons.

### BUSINESS ENVIRONMENT

| | US | Boston |
|---|---|---|
| Number of direct flights, 1998 | 259 | 440 |
| Level of culture (best = 100) | 83.4 | 99.4 |
| Crime index, 1998 | 485 | 378 |
| Population diversity index, 1998 | 33 | 24 |
| % of unionized employees | 8.6% | 9.2% |
| Corporate taxes - % state revenues, 1999 | 3.1% | 4.9% |
| Sound municipal management, 1999 | | B- |
| Traffic congestion, 1996 | 1.09 | 1.09 |
| No. of days of pollution | 10 | 2 |

### COMMENTS

**Advantages:** Very major construction projects: Logan airport expansion, underground roads but to date this project has cost seven times more than anticipated and has siphoned off all of the city's funds, downtown convention centre projected for 2003

Large services sector, especially in the health field (Merck & Co., American Home Products, Amgen), some financial services and some business services

Good venture capital network

Good quality of life: City of young professionals

**Drawbacks:** Very high business operating costs: high regulatory costs

High cost of living

In spite of the presence of three major universities, there is a shortage of qualified labour in the technology sector.

**Note:** *"Construction unions warn that, if neighborhood activists continue to object to projects, developers and investors may take their money elsewhere."*

# BOSTON

## Non-residential

### LOCAL COMMENTS

The phenomenal expansion of the biotechnology industry and the high technology euphoria have made a direct hit on Boston in both its downtown and suburban real estate sector. The supply of new office space is being slowed by conservative financing. The downtown is one of the most prized in the United States.

The development of the Seaport District with hotels, offices and high-rise apartments is responding to the strong demand. Nine blocks are expected to be built around Fan Pier, including office buildings, two hotels and two high-rise apartment buildings. Similarly, redevelopment is expected in the Fenway area.

The retail sector remains strong, however, there is a supply-to-demand excess.

### HOTEL MARKET

**Demand**

The demand for hotels is fuelled by the office sector and the conventions. The new Boston Convention and Exhibition Center (BCEC) is scheduled for the end of 2003: it includes 4,500 new hotel rooms. The development of Seaport District and economic growth ensure the success of the hotel sector.

**Supply**

Since 1997, more than 2,300 rooms have been added to the market (including 362 at the Wyndham Boston and 599 at the airport Hilton), not counting the current construction of 850 rooms including two Doubletree Hotels and another at Millennium Place. Several hotels are anticipated in the market b 2003.

### OFFICE MARKET: BOSTON

The demand for office space is growing at a fast pace. The supply, however, is limited. Only four high-rises can accommodate 100,000 sq. ft. of contiguous space:
100 Summer Street, 125 High Street, 53 State Street and 125 Summer Street. Only three new projects are anticipated: 10 St. James Avenue (370,000 sq. ft. available), World Trade Center East (165,250 sq. ft. available) and 111 Huntington Avenue (663,500 sq. ft. available). Alternatives to new construction are also offered: by renovating 470 Atlantic Ave., 350,000 sq. ft. of class A space are introduced into the financial district. Land for development is lacking. The borders of the downtown therefore extend to include South Boston Waterfront and the Kenmore sector. Businesses also create satellite offices outside these boundaries.

**Financing Data**

Financing sources: Insurance companies
Financing supply: Controlled
Capitalization rate: 9.5%
Internal rate of return: 12.5%

### OFFICE MARKET: CAMBRIDGE

In Cambridge, four biotechnology centres totalling 875,000 sq. ft. were built. Certain activists are opposed and special permits must be obtained, which delays the projects by 6 to 12 months. Some new biotechnology centres totalling more than one million sq. ft. have been approved. Luxury apartments, office buildings, etc. are being built around these centres.

Office workspace is so tight that we note significant migration to the suburbs. The supply there remains tightly controlled by real estate financing prudence. In spite of this prudence, 2.9 million sq. ft. have been built and rented in the suburbs. Cisco Systems is seeking from 1 to 2 million sq. ft. there, Oracle 400,000 and Sycamore Networks 400,000. The most active sub-markets are located on Route 128 Northwest and Route 495 West. The demand is even reaching some secondary sectors such as Watertown, Acton, Boxborough, Stoughton and Westford.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | **Centre** | **Suburb** | **Centre** | **Suburb** |
| Total inventory | 39,780,886 | 66,044,739 | 7,220,758 | 1,263,825 |
| Vacant | 1,290,423 | 6,429,299 | 331,337 | 29,359 |
| Vacancy rate | 3.2% | 9.7% | 4.6% | 2.3% |
| Vacant sublets | 217,248 | 1,421,588 | 18,444 | 3,652 |
| Under construction | 2,316,860 | 3,513,020 | 3,398,841 | 3,359,900 |
| Net absorption | 422,769 | 2,247,022 | 246,987 | 590,765 |
| Weighted average rent | $40.50 | $31.20 | $35.50 | $28.70 |

# NEW YORK- MANHATTAN

## Residential

### LOCAL ECONOMY

**Jobs**

| Jobs | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.9% | 2.40% | 2.50% | 2.40% |
| Unemployment | 5.3% | 5.60% | 5.90% | 7.10% |

| | US | New York |
|---|---|---|
| Per capita income, 1998 | 21,653 | 23,648 |
| Cost of living index, 1999 | 111 | 157 |
| Business diversity index, 1998 | 18 | 36.0 |
| Level of venture capital, $B 1999 | 71 | 344 |
| % of female managers | 37.9% | 43.1% |
| % of bachelors, 1998 | 23.3% | 24.9% |
| Growth in profess./managers | 0.3% | -0.9% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Bronx | 3.79% | -21% |
| Brooklyn | 13.17% | 134% |
| Manhattan | 14.27% | 31% |
| Queens | 8.95% | 43% |
| Staten Island | 11.21% | 49% |
| Nassau County | 5.15% | 16% |
| Suffolk County | 22.05% | 8% |
| Putnam County | 1.77% | -18% |
| Rockland County | 3.33% | 33% |
| Westchester County | 7.07% | -21% |

Apartments supply 60% of the housing.

The 1999 supply-to-demand deficit is estimated at 11,595 units. The prices of condominiums rose 15% in 1999. Nassau-Suffolk has the nation's best market conditions.

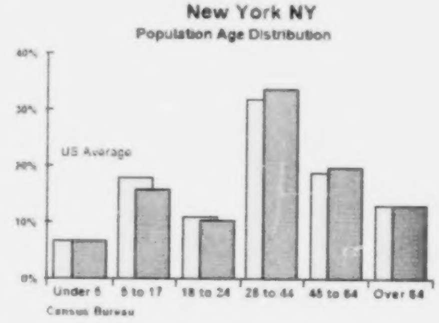
The cost of ownership is 8.4% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 45.3

Renting: 41.8

### DEMOGRAPHICS

**Population Growth 93-00: 0.4%**



A large number of single persons work there. This has always been an emigration area. However, this trend seems reversed recently and population growth is approaching that observed nation-wide. The job losses in the financial sector have been substantially compensated by gains in the business services and retail sectors.

### BUSINESS ENVIRONMENT

| | US | New York |
|---|---|---|
| Number of direct flights, 1998 | 259 | 1,147 |
| Level of culture (best = 100) | 83.4 | 100.0 |
| Crime index, 1998 | 485 | 3,231 |
| Population diversity index, 1998 | 33 | 60 |
| % of unionized employees | 8.6% | 15.3% |
| Corporate taxes - % state revenues, 1999 | 3.1% | 5.3% |
| Sound municipal management, 1999 | | B |
| Traffic congestion, 1996 | 1.09 | 1.18 |
| No. of days of pollution | 10 | 10 |

### COMMENTS

| | |
|---|---|
| **Advantages:** | The vitality comes from international immigration.<br>Diversified economy, city of tourism and culture<br>Phenomenal growth in telecommunications companies (Internet)<br>The film industry grew 57% in 1999<br>Modernization plans for LaGuardia and Kennedy airports |
| **Drawbacks:** | Deteriorated infrastructure: long distances to travel to work, troubled public schools<br>Exorbitant housing costs<br>Crime index still high<br>Pollution<br>Significant labour shortage<br>Cutbacks in health care |

# NEW YORK-MANHATTAN

## Non-residential

### ECONOMIC CLIMATE

The favourable image of the city projected on television and in film contributes to the growth in tourism that is transforming New York's retail landscape. Not counting that the city is becoming populated. Nor counting that the offices are full: the phenomenal creation of 198,500 jobs in 1999 is continuing. In five years, a little under three-quarters of a million jobs have been created. The demand for retail stores and hotels is therefore very healthy. The financing supply is moderate.

With New Jersey's popularity for back office activities, many new jobs are being created in the business services sector. The economy does, however, remain vulnerable to the health of the financial sector.

### HOTELS

**Demand**

The New York hotel market is fuelled by tourism and office activity, both experiencing strong growth. Demand is outstripping supply.

**Supply**

Hotel construction was fairly limited in recent years. Hence, the renovation of existing hotels is progressing well (Pennsylvania, Berverly[sic], Holiday Inn/Martinique…). The projects nevertheless indicate the addition of 4,500 new rooms, either by conversion (Henry Hudson, Ritz Carlton, Marriott Courtyard, Apple Core, Fitzpatrick...) or new construction (Planet Hollywood, Sofitel, Embassy Suites...). Some new developments are expected at the Rockefeller Center, Chrysler Building and Coliseum...

### OFFICES

This market comprises 356 million sq. ft. of office space. Northern Midtown, containing 170 million sq. ft., is the most expensive. The vacancy rate went from 5.8% to 4.6% at the end of 1999. This high absorption is attributable to the influx of businesses involved in e-commerce and the Internet.

Three buildings under construction will contain 2.6 million sq. ft., that is to say 850,655 sq. ft. at 3 Times Square (The Reuters Building) soon finished, 1.04 million sq. ft. at 1 Rockefeller Plaza West and 850,655 sq. ft. at 383 Madison Avenue, to be completed by 2002. Other projects are anticipated: the Five Times Square and the Morgan Stanley's Rock West will break ground this year. new 37-floor, one-million sq. ft. tower for Ernst & Young at 787 Seventh Avenue. The Colombus Circle project is being discussed.

### STORES

All the major retailers want an address on 5th Avenue or Madison. Times Square is also very prized. The rent per square foot at street level is so high that the national retailers (Gap, Banana Republic, etc.) have stores on several levels and they stretch their tentacles by opening stores in all the Manhattan markets surrounding Midtown. The recreation retailers (Nike, Warner Brothers...) have announced new entertainment centres. Grand Central Station, Rockefeller Center and the World Trade Center are under renovation to capitalize on the millions of pedestrians. The retail sector is not about to experience a recession in this city.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Downtown | Midtown | Downtown | Midtown |
| Total inventory | 178,407,000 | 58,516,000 | 68,956,000 | 34,131,000 |
| Vacant | 10,643,000 | 3,404,000 | 4,960,000 | 5,053,000 |
| Vacancy rate | 6.0% | 5.8% | 7.2% | 14.8% |
| Vacant sublets | 2,744,000 | 839,000 | 424,000 | 413,000 |
| Under construction | 3,293,000 | n/ | n/a | n/a |
| Net absorption | 34,000 | 2,737,000 | 3,053,000 | -1,590,000 |
| Weighted average rent | $47.90 | $39.05 | $32.20 | $30.98 |
| Outlook for sale price variation | Same | Same | Same | Same |

# NEW YORK:

# NORTH & CENTRE NEW JERSEY

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 2.3% | 1.50% | 1.80% | 2.50% |
| Unemployment | 3.2% | 4.30% | 4.30% | 4.80% |

Dependent upon the robust health of the large New York metropolitan area, the two sub-areas (centre and north) contributed to 32% of the job growth in the greater area. Growth persists in Middlesex-Somerset.

### RESIDENTIAL MARKET

| Total Permits by Location | Distribution | 98-99 |
|---|---|---|
| Ocean County | 17.29% | 21% |
| Middlesex County | 13.29% | 19% |
| Monmouth County | 12.31% | -8% |
| Hudson County | 10.24% | 27% |
| Somerset County | 9.83% | -10% |
| Morris County | 9.31% | 28% |
| Bergen County | 7.52% | 49% |
| Essex County | 5.52% | 74% |
| Mercer County | 4.43% | -14% |
| Warren County | 3.64% | 22% |

There is a supply-to-demand shortfall and the occupancy rate of apartments is 100%. In 1999, multiples construction grew 26% in Jersey City. The sector alongside the Hudson River is highly prized. In Morris, the only new building with 100 units was rented at very high rates as soon as construction was completed. The retirement market is well served by the new construction in Newark.

In 1998, the ratios of housing costs to the median income were the following:

Ownership: 28.4 in the north and centre

Renting: 23.2 in the centre and 30.1 in the north

### DEMOGRAPHICS

**Population Growth**

| | 90-98 | 1998 |
|---|---|---|
| **New York-(CMSA)** | 2.8% | 200,33 |
| ***Central New Jersey*** | | |
| C-Middlesex (NJ) | 6.6% | 7,161 |
| C-Monmouth (NJ) | 9.1% | 6,034 |
| C-Union (NJ) | 1.4% | 5,006 |
| C-Mercer (NJ) | 1.8% | 3,316 |
| C-Somerset (NJ) | 17.8% | 2,829 |
| C-Hunterdon[sic] (NJ) | 13.6% | 1,224 |
| ***Northern New Jersey*** | | |
| N-Bergen (NJ) | 4.0% | 8,585 |
| N-Essex (NJ) | -3.6% | 7,502 |
| N-Hudson (NJ) | 0.7% | 5,571 |
| N-Passaic (NJ) | 3.2% | 4,857 |
| N-Morris (NJ) | 9.2% | 4,598 |

### BUSINESS ENVIRONMENT

Crime, pollution and traffic congestion are less problematic than in New York City.

The state of New Jersey stimulates the growth of its high technology sector with some incentive programs that link university researchers with the private sector (*Technology Centre in North Brunswick*). The state has also lowered its corporate taxes. The northern area is experiencing much international immigration. It benefits from winning conditions in all but the industrial and retail sectors.

### COMMENTS

**Advantages:**

Strategic location close to ports, airports, highways and public transport
Better market than New York for business services: many sub-contractors in the centre
Large middle-aged population with the nation's second highest income per capita
Recognized centre of the pharmaceutical industry and growth in biotechnology: good medical resources from Rutgers, Princeton and Hackensack universities, ease in finding qualified employees
New Jersey's Newark International Airport is experiencing strong growth.

**Drawbacks:**

Business operating costs on the rise
High cost of living: real estate market is one the nation's most expensive
Increasing traffic congestion
The shortages of labour and land for building limit the supply
The state of New York is contemplating removing the sales tax on clothing.

# NEW YORK:

# NORTH & CENTRE NEW JERSEY

## Non-residential

### LOCAL COMMENTS

These two areas profit from New York's economic growth: hence *Insurance Services Office Inc.* (ISO) just moved its head office and its 1,400 employees from New York to New Jersey. According to an official report, 116 businesses also relocated there in 1998, creating more than 10,500 jobs.

The number of speculative building projects, especially residential and office, is growing and they are completely rented before the end of the construction. Some businesses such as Prudential Insurance Company, AT&T and Merrill Lynch build their own buildings because of the shortage of class A space.

### SHOPPING CENTRE MARKET

**North**

The market for commercial space is the tightest here. The retail market is especially strong in Paramus, Ridgewood and Westwood. The national retailers are starting to enter this market. Some new products ar anticipated within two years. But, they will not satisfy the demand.

**Centre**

The commercial space sector is also in full effervescence. In Mercer, population immigration, especially in the Hamilton sector, is fuelling the retail market growth.

### OFFICE MARKET

This area contains 125 million sq. ft.

**North**

There is a shortfall in the supply of class A buildings. The builders renovate and reposition class B and C buildings to satisfy the demand. The sector most in demand is located in Jersey City along the Hudson River. This sector contains more than 11 million sq. ft. and between 8 and 10 million sq. ft. are on the drawing tables: among the enterprises soon setting up there in new buildings: Merrill Lynch and Paine Webber. It is the extension of Wall Street. Four hotels are also planned for there.

**Centre**

The Middlesex/Somerset area has the lowest unemployment rate. Approximately 850,000 sq. ft. of speculative development are planned for the year 2000. The telecommunications and pharmacology companies rent a great deal of space there. It is in Somerset that the market for class A space is the tightest. *"The largest office transaction in the county involved a 550,000 sq. ft. complex to Pharmacia & Upjohn. This reinforced New Jersey's status as one of the nation's leading centers for the pharmaceutical industry."* The Bridgewater, Princeton and Woodbridge markets are the most active. Prudential Insurance is planning to locate 1,700 employees there. There has been good absorption in Mercer since 1995. However, much space has been built there and the consolidation of Raytheon, Dow Jones and Union Camp has freed some.

This market is restricted by the strong zoning regulations. On the other hand, there is no problem securing financing there.

### OFFICE DATA BY SUB-SECTOR, 1999

| | North Suburb | | Centre Suburb | |
|---|---|---|---|---|
| | Class A | Class B | Class A | Class B |
| Total inventory | 45,932,279 | 25,793,171 | 36,325,889 | 30,318,627 |
| Vacant | 6,999,505 | 3,998,769 | 2,984,456 | 4,178,243 |
| Vacancy rate | 15.2% | 15.5% | 8.2% | 13.8% |
| Vacant sublets | 1,583,243 | 779,806 | 1,506,348 | 265,733 |
| Under construction | 3,845,430 | n/a | 1,332,290 | 263,000 |
| Net absorption | 4,612,182 | 3,692,216 | 2,892,525 | 1,044,818 |
| Weighted average rent | $24.71 | $21.25 | $25.50 | $21.50 |
| Outlook for sale price variation | Upward 6-10% | Upward 6-10% | Upward 1-5% | Upward 1-5% |

# CHICAGO

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.10% | 1.00% | 2.10% | 2.00% |
| Unemployment | 3.90% | 4.00% | 4.10% | 4.20% |

| | US | Chicago |
|---|---|---|
| Per capita income, 1998 | 21,653 | 24,483 |
| Cost of living index, 1999 | 111 | 121 |
| Business diversity index, 1998 | 18 | 11.4 |
| Level of venture capital, $B 1999 | 71 | 42 |
| % of female managers | 37.9% | 41.1% |
| % of bachelors, 1998 | 23.3% | 25.2% |
| Growth in profess./managers | 0.3% | -0.6% |

### RESIDENTIAL MARKET

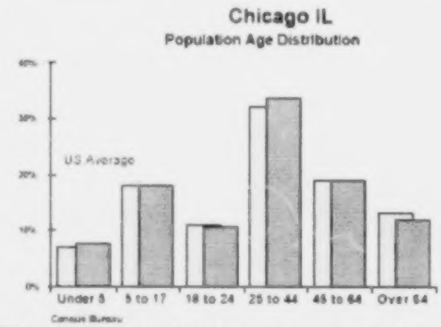
| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Chicago | 27.25% | 32% |
| Tinley Park | 3.93% | 22% |
| Naperville | 12.60% | -2% |
| Elmhurst | 1.97% | -18% |
| Aurora | 14.19% | 61% |
| St. Charles | 4.53% | 152% |
| Lake in the Hills | 3.80% | 40% |
| Algonquin | 3.24% | 76% |
| Joliet | 10.12% | 9% |
| Will County Area | 7.42% | 6% |
| Romeoville | 5.99% | 109% |
| Plainfield | 4.95% | 81% |

The 1999 supply-to-demand surplus is estimated at 5,437 units, or 0.2% of the total inventory, which is old and needs replacement.

The cost of ownership is 24% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:
Ownership: 31.5
Renting: 25.4

### DEMOGRAPHICS

**Population Growth 93-00: 5.5%**



The population is slightly under-represented in ages 65 and over. The population growth there was slightly lower than the national average in the past.

The local economy offers a large financial sector that has been affected by rationalization and now has mostly a large and growing business services component.

### BUSINESS ENVIRONMENT

| | US | Chicago |
|---|---|---|
| Number of direct flights, 1998 | 259 | 942 |
| Level of culture (best = 100) | 83.4 | 99.8 |
| Crime index, 1998 | 485 | 1,020 |
| Population diversity index, 1998 | 33 | 21 |
| % of unionized employees | 8.6% | 14.8% |
| Corporate taxes - % state revenues, 1999 | 3.1% | 3.6% |
| Sound municipal management, 1999 | | B- |
| Traffic congestion, 1996 | 1.09 | 1.34 |
| No. of days of pollution | 10 | 5 |

### COMMENTS

**Advantages**:

- Financial centre of the Mid-West
- A return to the city is sought at all cost
- The SME segment is growing strongly: 81% of the businesses belonging to the Chamber of Commerce have less than 100 employees

**Drawbacks**:

- Regulations too strict
- Shortage of qualified labour
- High business operating costs
- Crime rate still high

# CHICAGO

## Non-residential

### LOCAL COMMENTS

Chicago is making efforts to re-energize its downtown and seems to be succeeding. Residential growth and the development of entertainment centres make the city livelier for the tourists. Moreover, the active promotion of the options offered to tourists seems to be fruitful these past two years.

There is optimism concerning the future of conventions and trade shows.

The unions are very strong and demanding, which is costly.

### HOTELS

**Demand**

In the last 18 months, Chicago added 3,300 rooms to its supply and the market could absorb 2,000 more without a negative impact. The revenue per room has increased for seven years, fuelled by conventions and corporate demand. Demand is increasing but seems to want to stagnate for 2001.

**Supply**

Approximately 6,500 rooms are projected for construction. Present construction is luxurious: Par Hyatt (200 rms), Grand Bay (310 rms) and Peninsula (340 rms). We note that HBE Corporation recentl proposed 1,500 rms at the Adam's Mark Hotel in the River East sector. It is unlikely that all of the projects materialize because of the constraints imposed by the capital market.

### OFFICES

**Downtown**

Deeply affected by the rationalizations in the financial sector, Chicago is seeing its first large-scale projects since 1992: 332,608 sq. ft. in the Union Tower at 550 West Van Buren and 115,000 sq. ft. at the North Bridge. Four buildings under construction total 2.36 million sq. ft., 25% of which is already rented. In spite of these rationalizations and additions, the vacancy rate did not climb because of the growth in other jobs. It is 5-8% everywhere except in the East Loop where it is 15.5%.

**Suburbs**

Especially in communication technologies, the businesses continue to prosper there. However, during the year, the speculative supply of 3.5 million sq. ft. in new buildings exceeded the demand. In 1999, 1.6 million sq. ft. were delivered in the East-West Tollway sector and 1.3 in North Cook/Lake County. The vacancy rate rose slightly. There are projects for 13 new buildings totalling 1 million sq. ft.

**Financing Data**

Financing sources: Insurance companies
Financing supply: Moderate
Capitalization rate: 9-9.5%
Internal rate of return: 11%

### STORES

The shopping centre vacancy rate declined from 8.5% to 7.8% in spite of a supply increase in the range of 4.5 million sq. ft. in 1998 and 2.5 million sq. ft. in 1999. Furthermore, 5 million sq. ft. are under construction, 2.9 million of which will be delivered this year.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 41,836,730 | 28,345,533 | 45,844,933 | 32,689,963 |
| Vacant | 3,471,543 | 3,943,842 | 5,409,780 | 4,445,598 |
| Vacancy rate | 8.3% | 13.9% | 11.8% | 13.6% |
| Vacant sublets | [??]1 56 987 | 1,625,488 | 751,645 | 1,462,405 |
| Under construction | 382,436 | 2,594,804 | 704,470 | 55,850 |
| Net absorption | -1,881,569 | 508,386 | 226,957 | -777,930 |
| Weighted average rent | $33.23 | $26.00 | $26.19 | $22.54 |
| Outlook for sale price variation | Up 1-5% | Down 1-5% | Up 1-5% | Down 1-5% |

# MIAMI-FORT LAUDERDALE

## Residential

### LOCAL ECONOMY

| Jobs | Miami | Fort L | | | |
|---|---|---|---|---|---|
| Jobs | 99-00 | 99-00 | 98-99 | 97-98 | 96-97 |
| Growth | 2.10% | 2.90% | 2.00% | 2.20% | 3.00% |
| Unemployment | 1.90% | 4.00% | 5.10% | 5.50% | 6.20% |

| | US | Miami | Fort Lauderdale |
|---|---|---|---|
| Per capita income, 1998 | 21,653 | 17,262 | 21,418 |
| Cost of living index, 1999 | 111 | 115 | 111 |
| Business diversity index, 1998 | 18 | 19.0 | 23.6 |
| Level of venture capital, $B 1999 | 71 | 7 | 47 |
| % of female managers | 37.9% | 34.8% | 36.5% |
| % of bachelors, 1998 | 23.3% | 19.2% | 19.5% |
| Growth in profess./managers | 0.3% | -0.8% | 1.8% |

### RESIDENTIAL MARKET

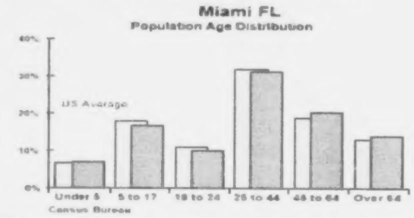
| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Pembroke Pines | 9.29% | -18% |
| Miramar | 8.75% | 27% |
| Fort Lauderdale | 6.71% | 239% |
| Coral Springs | 5.36% | 5% |
| Davie | 3.09% | -41% |
| Oakland Park | 2.01% | 429% |
| Coconut Creek | 1.65% | -50% |
| Parkland | 1.53% | 13% |
| Tamarac | 1.49% | -39% |
| Sunrise | 1.45% | 46% |
| Deerfield Beach | 1.43% | 61% |
| Hollywood | 1.24% | -23% |
| Miami-Dade County Area | 42.72% | 62% |
| Miami | 6.19% | 42% |
| Aventura | 4.09% | 54% |
| Miami Beach | 1.72% | -60% |
| Hialeah Gardens | 1.28% | -59% |

The 1999 supply-to-demand deficit is estimated at 1,583 units in Miami and 5,886 in Fort Lauderdale. The cost of renting is 13-28% higher than the cost of ownership. In 1998, the ratios of these costs to the median income were the following:

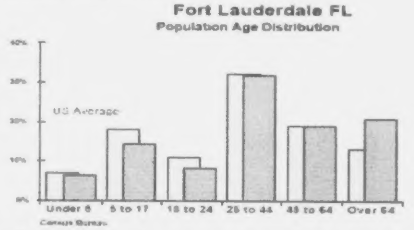
Ownership: 29.8 in Miami, 19.4 in Fort Lauderdale
Renting: 33.8 in Miami, 25.0 in Fort Lauderdale

### DEMOGRAPHICS

**Population Growth 93-00:**
**Miami: 8.4%; Fort Lauderdale: 13%**



The retirement immigration seen here has been weaker since 1996. Hurricane Hugo in 1993 caused emigration.



All the population growth is attributable to the age 64 and over immigration, with an under-representation of those ages 5-24. It is the nation's retirement market.

### BUSINESS ENVIRONMENT

| | United States | Miami | Fort Lauderdale |
|---|---|---|---|
| Number of direct flights, 1998 | 259 | 262 | 181 |
| Level of culture (best = 100) | 83.4 | 91.7 | 84.3 |
| Crime index, 1998 | 485 | 452 | 183.3 |
| Population diversity index, 1998 | 33 | 103 | 10 |
| % of unionized employees | 8.6% | 3.9% | 3.9% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 1,9% | 1.9% |
| Traffic congestion, 1996 | 1.09 | 1.34 | 1.03 |
| No. of days of pollution | 10 | 0 | 1 |

### COMMENTS

| | Miami | Fort Lauderdale |
|---|---|---|
| **Advantages:** | Nearly 60% of the economy depends on trade with Latin America<br>Harbour and airport industry in full expansion | Several professional services are joining high technology businesses already set up.<br>Good per capita income<br>Flourishing tourism industry |
| **Drawbacks:** | Traffic congestion very problematic and shortage of public transportation<br>Municipal tax system in a poor state<br>Low-level educational system<br>Dependence on the tourism sector | Under-funding of the education system<br>Poor financing image<br>Large number of underpaid jobs |

# MIAMI-FORT LAUDERDALE

## Non-residential

### LOCAL COMMENTS

Florida's most active markets in the retail trade are Miami and Fort Lauderdale.

**Fort Lauderdale**: Expansion of the Fort Lauderdale international airport and the Everglades Port.

**Miami**: Personal income there has increased 3% per year since 1996. Miami hopes to grow with the trade from Latin America. The population does not have confidence in the local administration. There is talk that the political system is corrupt.

### HOTEL MARKET IN MIAMI

**Demand**

The growth of tourism in the past decade has been remarkable and continues. In five years, two Super Bowls brought the city a lot of visibility. The capital of the wealth Latin Americans is transforming the landscape there. The historic South Beach art deco district attracts film and fashion stars and international tourists. Miami's stores attract vacationers. Ignoring that the city's cultural attractions are being enhanced by a new arena, an opera house, an applied arts centre, the expansion of the Bass Museum and the new building for the Miami Ballet. A great need for new rooms, especially in the luxury segment.

**Supply**

The supply is responding to this demand, perhaps with too much haste. It is expected that the supply will increase b 5,600 rooms over the existing 47,000. We mention the following : 1,000-rm Diplomat Resort & Country Club, 300-rm Ritz Carlton, 300-rm J.W. Marriott, 236-rm Marriott South Beach, 422-rm Royal Palm Crown Plaza, 250-rm and 125-condo Ritz-Carlton Coconut Grove, 329-rm Mandarin Oriental Hotel, 222-rm Four Seasons, 385-rm other Ritz-Carlton, 324-rm Shore Club, 200-rm W Hotel, 180-r Marriott Hotel… An excess supply is therefore a concern. However, the hotel occupancy in the convention sub-markets is expected to decline. The luxury segment is recent in Miami. The employees will need training.

### OFFICE MARKET

**Miami**

This market is the largest in Florida with 34 million sq. ft. Miami is on the verge of receiving 1 million sq. ft. of new office space. Some large tenants (Lucent Technologies, MCI, Barclays Financial and Espirito Santo) are waiting for new projects in order to relocate. Opus is planning 700,000 sq. ft. of class A office space close to the airport. They want to invest in training to attract thirty new companies that would be prepared to set up there.

**Fort Lauderdale**

The market comprises 21 million sq. ft. and the centre 4 million sq. ft. This strategic location in southern Florida is an entry to the markets of Latin America. A little more activity is expected in the Cypress Creek, Sawgrass and downtown markets. The supply does not satisfy the demand needs, especially for the large class A space. This demand comes from Precision Response, Citrix Systems, which will add 1,100 jobs.

**Financing Data**

Financing sources: Insurance companies, REITs
Financing supply: Moderate
Capitalization rate: 10.3%

### COMMERCIAL MARKET

In Miami, the expansions at the Aventura Mall and the opening of the stores at Sunset Place, as well as the Dolphin Mall solidify Miami's predominance in the retail trade sector. *"The Brickell area is striving to follow Coral Gable's example by providing the professional work force with various retail and entertainment amenities."* In Fort Lauderdale, Sawgrass Mills remains a highly prized site.

### OFFICE DATA IN FORT LAUDERDALE, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 1,824,192 | 3,990,831 | 15,921,642 | 9,548,38 |
| Vacant | 81,753 | 487,167 | 278,087 | 1,233,740 |
| Vacancy rate | 4.5% | 12.2% | 1.7% | 12.9% |
| Vacant sublets | 74,864 | 99,621 | 19,849 | 241,745 |
| Under construction | na | 327,640 | na | 449,729 |
| Net absorption | 223,580 | 567,245 | 18,125 | 274,880 |
| Weighted average rent | $28.00 | $23.52 | $27.53 | $18.76 |
| Outlook for sale price increase | 1-5% | 1-5% | 1-5% | 1-5% |

# ORLANDO/TAMPA

## Non-residential

### BUSINESS ENVIRONMENT

| | Orlando | Tampa |
|---|---|---|
| **Advantages** | The retirees and military embark on a second career.<br>Sophisticated air operations. Interest in growing aerospace science because of tax incentives.<br>Majority of SMEs with less than 100 employees in tourism<br>Seat of the largest number of film production facilities in the nation | Good labour pool<br>Land not very costly<br>Low cost of living<br>Good business climate |
| **Drawbacks** | Little new capital available: the government is only just beginning to react.<br>Congested transportation infrastructure<br>High energy costs<br>Crowds of vacationers<br>Hurricanes | Infrastructure congested but the *Committee of 99* is a group formed to propose the means for financing its improvement. |

### STORES IN ORLANDO

The number of shopping centres doubled between 1997 and 1999. Several projects totalling 4 million sq. ft. are planned. Orlando attracts more and more high-end retailers like Nordstrom and Bloomingdale.

### LOCAL ECONOMIES

**Jobs**

| | | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|---|
| Orlando | Growth | 5.90% | 4.40% | 5.20% | 6.00% |
| | Unemployment | 2.60% | 2.80% | 3.10% | 3.50% |
| Tampa | Growth | 4.30% | 4.80% | 5.40% | 5.50% |
| | Unemployment | 2.90% | 2.80% | 3.00% | 3.50% |

In 1999, Orlando had the strongest job growth in America.

| | US | Orlando | Tampa |
|---|---|---|---|
| Per capita income, 1998 | 21,653 | 19,135 | 19,794 |
| Cost of living index, 1999 | 111 | 111 | 103 |
| Business diversity index, 1998 | 18 | 24.0 | 18.2 |
| Level of venture capital, SB 1999 | 71 | 12 | 4 |
| % of female managers | 37.9% | 39.9% | 35.9% |
| % of bachelors, 1998 | 23.3% | 20.4% | 17.5% |
| Growth in profess./managers | 0.3% | 1.1% | 0.9% |

### QUALITY OF LIFE

| | US | Orlando | Tampa |
|---|---|---|---|
| Number of direct flights, 1998 | 259 | 374 | 273 |
| Level of culture (best = 100) | 83.4 | 79.0 | 88.8 |
| Crime index, 1998 | 485 | 255 | 362 |
| Population diversity index, 1998 | 33 | 3 | 13 |
| % of unionized employees | 8.6% | 3.1% | 2.1% |
| Corporate taxes - % state, 1999 | 3.1% | 1.9% | 1.9% |
| Traffic congestion, 1996 | 1.09 | 0.91 | 1.06 |
| No. of days of pollution | 10 | 0 | 1 |

### COMMENTS ON ORLANDO

A city of high immigration of single persons aged 25 to 44, the economy is dominated by tourism and business services. Immigration has declined greatly since 1998 and housing construction exceeds absorption.

The anticipated infrastructure developments will facilitate life for all of the players: the expansion of the international airport will welcome 40 million additional passengers and the 52-mile light rail project will relieve traffic congestion and facilitate movement. 1999 ende with several announcements of real estate developments in all the sectors. Jaymont Realty announced the sale o its downtown site totalling 2.3 acres. Some re-development opportunities may include all types of buildings.

### COMMENTS ON TAMPA

Tampa would be an ideal site for some head offices. Welcoming business attitude, flexible municipal administration, warm climate, numerous beaches, low occupancy and labour costs and taxes, job creation incentives.

. 1999: Chase Manhattan Bank moved its treasur centre there from New York and will add a national call centre. This expansion into a new three-building complex in Highland Oaks will create 2,140 jobs.

. 1998: Citicorp expanded into a 650,000 sq. ft. campus in Brandon.

. Central location close to the highway, ideal for a grea many high technology companies.

*"The statistics on job growth are distorted by the growth of employee leasing companies, whose workers are technically on the payroll of the local company but actually work elsewhere. The local job statistics include about 100,000 such phantom workers."*

# ORLANDO-TAMPA

## Non-residential

### HOTEL MARKET IN ORLANDO

**Demand**

The growth in the 38.6 million annual visitors is indeed stimulated by Orlando's famous thematic attraction parks. Soon the tourists will find more parks and hotel and shopping options.

**Supply**

The 100,000-room inventory grew 8.2% in 1999. An increase of 4,600 rooms is expected in 2000 and the inventory will rise to 115,300 rooms by 2003. We mention 750 rooms in the Loews Portofino Bay Hotel and 650 rooms in the Hard Rock Hotel at Universal Studios, 1,000 rooms in the Royal Pacific Hotel, 1,920 rooms in the All Star Movies Resort and 1,300 rooms in Disney's Animal Kingdom Lodge, 500 rooms in the Marriot at the Orlando World Center, 250 rooms in the downtown Grand Bohemian, 1,400 rooms in the Opryland Hotel at Kissimmee.

In this highly competitive environment, the existing hotels have to renovate. We mention the renovations at the Sheraton Studio City, Sheraton World Resort, Wyndham Orlando Resor and Peabody.

### FINANCING DATA

Financing sources: Insurance companies, pension funds, commercial banks

Financing supply: Ample in Tampa, low in Orlando

Capitalization rate: 9.2-10.5%

Internal rate of return: 12%

### OFFICE MARKET: ORLANDO

Although the tourism industry is large and profitable, the economic base is diversifying because of the quality of the work force, the reasonable cost of living and a welcoming business environment. In 1999, job growth reached 5.9%. The retirees and military embark on a second career there.

Since 1997, the number of high technology companies rose 44%. Among the leaders: Lockheed Martin and Lucent Technologies. Not counting strong growth in international trade and film production. Well served by the office real estate inventory and convention infrastructure, a great many major corporations are relocating there. There are plans to expand the convention centre to accommodate larger groups as well as for a new centre in Kissimmee. With regard to this, Orlando is well positioned in relation to Atlanta, New Orleans, and Chicago.

The Lake Mary/Heathrow and Sanford corridor is in highest demand. At the end of 1999, 2,4 million sq. ft. were under construction and 4.5 million sq. ft. were at project stage in 26 buildings. However, the demand does not succeed in absorbing all the new supply.

### OFFICE MARKET: TAMPA

This is the most active market in the Southeast. Strong growth is expected there in the coming years. The office space comprises 31.2 million sq. ft. in 461 buildings. There is a lack of class A space. Many high technology companies are found there: microelectronics, silicone technology, software development, bio-medical (USF Research), call centres (United Health).

Absorption was phenomenal in 1999. The Hillsborough and Pinellas sub-markets are the most active with 964,280 and 542,274 sq. ft. absorbed respectively. At the end of 1999, 1.3 million pre-leased sq. ft. were completed. In the constructio pipeline, we find 4.2 million sq. ft. out of the expected 7.1 million supply. Demand is keeping pace with supply.

The demand in Westshore, close to the airport and to Pinellas/Hillsboro and soon Pasco (because of the construction o a highway) is growing by 18%.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Orlando | | | | Tampa | | | |
|---|---|---|---|---|---|---|---|---|
| | Class A | | Class B | | Class A | | Class B | |
| | Centre | Suburb | Centre | Suburb | Centre | Suburb | Centre | Suburb |
| Total inventory (in M sq. ft.) | 3.267 | 8.332 | 1.719 | 8.079 | 4.774 | 8.673 | 0.957 | 8.648 |
| Vacant | 114,000 | 872,000 | 250,000 | 1,058,000 | 390,557 | 781,611 | 102,629 | 589,675 |
| Vacancy rate | 3.5% | 10.5% | 14.5% | 13.1% | 8.2% | 9.0% | 10.7% | 6.8% |
| Vacant sublets | 29,000 | 41,000 | 10,000 | 59,000 | 42,300 | 116,000 | 56,000 | 62 000 |
| Under construction | 955,000 | 1,338,000 | n/a | 128,000 | 145,000 | 1,083,840 | 0 | 45,685 |
| Net absorption | 21,000 | 1,727,000 | 200,000 | -20,000 | 86,727 | 440,238 | 99,115 | 451,092 |
| Weighted average rent | $22.44 | $20.73 | $20.55 | $15.75 | $20.00 | $22.00 | $17.00 | $17.00 |
| Outlook: rise in sale price | 1-5% | 6-10% | 6-10% | 6-10% | 6-10% | 1-5% | 6-10% | 1-5% |

# CHARLOTTE

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.80% | 2.10% | 2.80% | 3.60% |
| Unemployment | 2.90% | 2.40% | 2.60% | 2.90% |

| | US | Charlotte |
|---|---|---|
| Per capita income, 1998 | 21,653 | 21,736 |
| Cost of living index, 1999 | 111 | 112 |
| Business diversity index, 1998 | 18 | 21.9 |
| Level of venture capital, $B 1999 | 71 | 17 |
| % of female managers | 37.9% | 35.7% |
| % of bachelors, 1998 | 23.3% | 20.3% |
| Growth in profess./managers | 0.3% | -0.1% |

### RESIDENTIAL MARKET

| Permits by Area | Distribution | 98-99 |
|---|---|---|
| Cabarrus County | 13.36% | 96% |
| Gaston County Area | 3.15% | 6% |
| Gastonia | 1.85% | 69% |
| Lincoln County | 2.88% | 40% |
| Mecklenburg County | 57.34% | 26% |
| Rowan County | 3.27% | -8% |
| Union County | 9.87% | 4% |
| York County Area | 4.46% | 172% |
| Rock Hill | 3.31% | 51% |
| Fort Mill | 0.45% | -7% |
| Clover | 0.07% | -7% |

The 1999 supply-to-demand surplus is estimated at 9,179 units or 1.8% of the total inventory (substantial overbuilding). But the sales or reasonably-priced properties are conducted in less than 90 days.

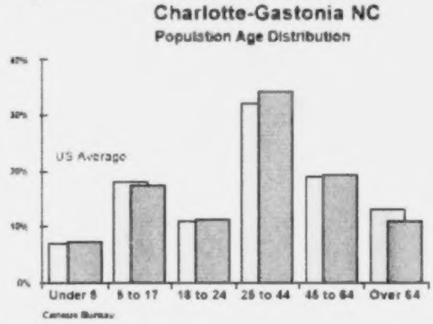
The cost of ownership is 11% lower than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 18.5

Renting: 20,9

### DEMOGRAPHICS

**Population Growth 93-00: 10.3%**



The age 25-44 category predominates. Immigration fuels the financial sector (Bank of America and First Union) that grew strongly in the 90s. High technology is starting there.

Since the proportion of multiple housing is low, the vacancy rate is very vulnerable to any population migration.

Two major construction projects in the downtown with nine floors and 266 luxury apartments from $990 to $3,500 per month. A third with 392 apartments is under construction at Lake Wylie in York County.

### BUSINESS ENVIRONMENT

| | US | Charlotte |
|---|---|---|
| Number of direct flights, 1998 | 259 | 201 |
| Level of culture (best = 100) | 83.4 | 82.4 |
| Crime index, 1998 | 485 | 528 |
| Population diversity index, 1998 | 33 | 24 |
| % of unionized employees | 8.6% | 4.3% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 4.0% |
| Traffic congestion, 1996 | 1.09 | 1.03 |
| No. of days of pollution | 10 | 3 |

### COMMENTS

| | |
|---|---|
| **Advantages:** | Business culture open to entrepreneurs and work culture strict<br>Good quality of life in terms of climate, physical environment, many recreational activities<br>Leading-edge, 15,300-acre industrial park for cargo transport (Global Trans-Park).<br>Construction of a circling autostrad.<br>Second city after New York that is experiencing good growth in its centre: construction of a major downtown development plan (Charlotte Center City 2010) where they plan to increase the density<br>The state Department of Transport is planning a "*high-speed rail system, linking Charlotte to Raleigh, Greensboro and other points.*" |
| **Drawbacks:** | Conservatism and traditionalism<br>Economy very dependent on the national economic cycles and in steeper decline than expected<br>Several challenges in the rural portion of eastern North Carolina: high unemployment rate, poor road, water and sewer infrastructure. |

# CHARLOTTE

## Non-residential

### LOCAL COMMENTS

One of the highest growth metropolitan areas, Charlotte is the nation's second largest financial centre with assets of $488 billion, primarily because of NationsBank and First Union. We note that the merger announced between NationsBank and Bank of America should unite the enterprises of the West and East Coast. The head office will be established in Charlotte. This is also the centre of a large urbanized area and secondary corporate offices set up there. In the last ten years, 7,200 companies invested more than $3.7 billion there. Charlotte is well served by its highway system and the airport.

The downtown is strong but the residents are setting up in more and more distant suburbs. Travel time to work and traffic congestion are increasing. However, the construction of a new highway on the south perimeter of the city should reduce congestion but amplify the residents' spread.

Charlotte's growth in the three sectors (office, industrial, commerce) should continue until 2025.

### THE STORES

At the present time, there are 16 new construction projects totalling 2.1 million sq. ft., the majority of which are already rented. Already 2.1 million additional sq. ft. are proposed. The neighbourhood shopping centres dominate the construction landscape.

### OFFICE MARKET

Approximately 33,000 new jobs were created in 1998. The work force has grown 28% in ten years, which ensures that it can be drawn upon without a serious shortage problem.

The downtown's domination of the office market is unique in the nation. The First Union located its one million sq. ft. in the downtown's Uptown neighbourhood. The local real estate developers are very conservative and want to preserve low vacancy rates. In 1999, 4.4 million sq. ft. were under construction, 80% of which is already rented.

In the suburbs, the demand does not manage to absorb the supply.

Charlotte now attracts many call and processing centres: Allstate, GM's ONStar, T1AA and Microsoft are growing. In 2000, construction will commence of 3.2 million sq. ft. In high technology, Opsrey, LendingTree.com, IBM and EDS will add more than 1,500 jobs.

### INDUSTRIES

Charlotte is the second largest distribution centre in the Southeast, after Atlanta. The industrial sector is solely in distribution because of the good highway infrastructure serving the region and also because of the high cost of labour.

The new buildings are built according to specifications and vary between 100,000 and 500,000 sq. ft. The new construction on the market is absorbed rapidly without impact on the vacancy rate. A net absorption of 1.5 million sq. ft. in 1999 shows that demand is not waning. The older buildings are brought up to date technologically: fibre optics, electrical systems and modern functionalities, etc.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 7,081,770 | 11,963,595 | 3,355,574 | 5,328,595 |
| Vacant | 43,150 | 1,496,000 | 215,000 | 692,719 |
| Vacancy rate | 0.6% | 12.5% | 6.4% | 13.0% |
| Vacant sublets | 40,000 | 150,000 | 5,000 | 50,000 |
| Under construction | 2,115,000 | 2,083,800 | 91,500 | 109,700 |
| Net absorption | 422,846 | 1,468,050 | -64,875 | 55,653 |
| Weighted average rent | $25.00 | $19.25 | $18.50 | $16.00 |

# NORFOLK

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.60% | 1.50% | 1.60% | 2.70% |
| Unemployment | 3.10% | 3.80% | 3.70% | 4.90% |

| | U S | Norfolk |
|---|---|---|
| Per capita income, 1998 | 21,653 | 17,743 |
| Cost of living index, 1999 | 111 | 100 |
| Business diversity index, 1998 | 18 | 16.2 |
| Level of venture capital, $B 1999 | 71 | 5 |
| % of female managers | 37.9% | 43.1% |
| % of bachelors, 1998 | 23.3% | 20.6% |
| Growth in profess./managers | 0.3% | -0.2% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99/% |
|---|---|---|
| Chesapeake | 19.67% | 9% |
| Hampton | 3.86% | 32% |
| Newport News | 7.95% | 38% |
| Norfolk | 1.97% | -33% |
| Poquoson | 0.67% | 38% |
| Portsmouth | 2.81% | -2% |
| Suffolk | 9.17% | 7% |
| Virginia Beach | 25.56% | 17% |
| Williamsburg | 0.71% | -29% |
| Currituck County | 3.42% | -4% |
| Gloucester County | 2.28% | -3% |
| Isle of Wight County | 3.15% | 11% |
| James City County | 11.19% | 14% |
| Mathews County | 0.63% | 7% |
| York County | 6.96% | 24% |

The 1999 supply-to-demand surplus was estimated at 7,406 units, or 1.3% of the inventory, but this would not be the case for the year 2000.

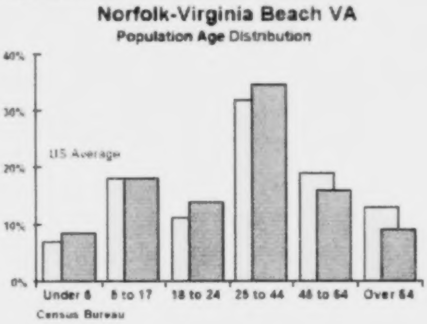
The cost of ownership is 28% lower than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 17.7

Renting: 24.6

### DEMOGRAPHICS

**Population Growth 93-00: 5.3%**



The population aged 18-44, reflecting the labour force, is over-weighted there, probably because of the size of the military population.

We note that very recently the absorption of multi-family housing and commercial space in the downtown underwent unprecedented improvement. This allows believing in a growth potential.

### BUSINESS ENVIRONMENT

| | US | Norfolk |
|---|---|---|
| Number of direct flights, 1998 | 259 | 86 |
| Level of culture (best =100) | 83.4 | 79.4 |
| Crime index, 1998 | 485 | 163 |
| Population diversity index, 1998 | 33 | 35 |
| % of unionized employees | 8.6% | 3.8% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 1.7% |
| Traffic congestion, 1996 | 1.09 | 0.96 |
| No. of days of pollution | 10 | 1 |

### COMMENTS

**Advantages:**
- Low business operating costs
- Diversity of the economic base, but importance of the government sector with a high militar component: 15% of the labour force
- Proximity to markets and low transportation costs

**Drawbacks:**
- Low per capita income
- Rationalization of the military sector

# NORFOLK

## Non-residential

### LOCAL COMMENTS

The economic indicators point to strong growth for Norfolk in 2000. The business services sector is significant.
Third in the nation as an ideal site to locate call centres.

### START OF HIGH TECHNOLOGY EMERGENCE

Norfolk is starting to emerge as a city offering several advantages to technological companies.

- The number of engineers per capita there is the highest in the nation.
- Two major laboratories, Thomas Jefferson National Accelerator Facility and NASA Langley Research Center are well known.
- The Hampton Road Port with some military terminals is becoming a large export port.
- A highly technological conference centre at Chesapeake is under construction.
- The telecommunications infrastructure is highl developed.
- The international airport should finish some large additions to its infrastructure within three years.

Four major companies relocated their operations to Norfolk in 1999. We mention Towers Perrin, Barre, Gateway and TWA. The operations of MCI, UPS and Harris Select, First Data Corp., Seimens Automotive, Canon Virginia and Advanced Technologies are found there.

### OFFICE MARKET

The downtown is undergoing major renovation. Absorption is better in the suburbs.

In the suburbs, the construction of class A space is expected in the areas of Greenbrier/Battlefield, Lake Wright and Oyster Point.

In Suffolk, the high technology companies are setting up some distribution centres: Mercantile Logistics, Allied Colloids, Mariah Vision Entertainment.

The addition of 1,900 engineering jobs is anticipated in the coming year.

**Financing Data**

Financing sources: Insurance companies, commercial banks
Financing supply: Ample
Capitalization rate: 9.0%-10.0%
Internal rate of return: 12.0%-14.0%

### STORES AND HOTELS

Outside New York and Chicago, few cities have a developed downtown. In eastern United States, the downtown is being reborn in Norfolk and Tampa. In this rebirth, commercial precedes residential. The hotel market is not vigorous in Norfolk. This market is fuelled by corporations, tourism and international visitors.

### OFFICE DATA BY SUB-SECTOR, 1999

| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 1,679,724 | 5,150,162 | 1,767 335 | 10,231,743 |
| Vacant | 64,441 | 416,131 | 228,149 | 582,644 |
| Vacancy rate | 3.8% | 8.1% | 12.9% | 5.7% |
| Vacant sublets | n/a | n/a | n/a | n/a |
| Under construction | 0 | 64,000 | 0 | 65,000 |
| Net absorption | -8,241 | 279,327 | -55,202 | 321,353 |
| Weighted average rent | $18.25 | $17.00 | $14.25 | $14.50 |
| Outlook for rise in sale price | 6-10% | 1-5% | 6-10% | 1-5% |

# COLUMBUS

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.10% | 1.00% | 2.00% | 3.30% |
| Unemployment | 2.60% | 2.80% | 2.80% | 2.80% |

| | US | Columbus |
|---|---|---|
| Per capita income, 1998 | 21,653 | 21,749 |
| Cost of living index, 1999 | 111 | 111 |
| Business diversity index, 1998 | 18 | 13,6 |
| Level of venture capital, $B 1999 | 71 | 10 |
| % of women managers | 37.9% | 34.9% |
| % of bachelors, 1998 | 23.3% | 24.0% |
| Growth in profess./managers | 0.3% | 1.0% |

### RESIDENTIAL MARKET

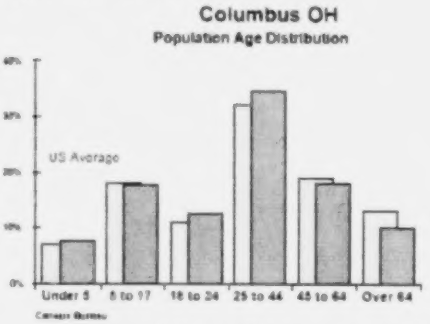
| Total Permits by Area | Distribution | 98-99/% |
|---|---|---|
| Delaware County Area | 12.38% | 52% |
| County Part | 3.54% | -24% |
| Delaware | 2.38% | 1% |
| Powell | 1.05% | -37% |
| Pickerington | 1.18% | 58% |
| Lancaster | 1.03% | -21% |
| Violet Twp. | 1.00% | -7% |
| Columbus | 52.52% | 84% |
| Reynolkdsburg[sic] | 4.95% | 174% |
| Grove City | 3.81% | -13% |
| Dublin | 3.38% | -3% |
| Franklin County Area | 2.03% | -19% |
| Hilliard | 1.97% | -28% |
| Westerville | 1.30% | 50% |
| Newark | 7.48% | 11% |

The 1999 supply-to-demand surplus is estimated at 1.1% of the inventory. Construction was very active in 1999.

The cost of ownership is 15% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:
Ownership: 22.1
Renting: 19.2

### DEMOGRAPHICS

**Population Growth 93-00: 8.6%**



The population is slightly younger than that o the nation. Past growth is very stable. Job and retail sector growth are stable, which is an indicator of the population's future stability.

The northwest of the city houses the wealthiest white collar workers. In the Sawmill Road neighbourhood, there are 2.6 million sq. ft. of stores. The vacancy rate is 5.25%.

### BUSINESS ENVIRONMENT

| | US | Columbus |
|---|---|---|
| Number of direct flights, 1998 | 259 | 200 |
| Level of culture (best =100) | 83.4 | 91.7 |
| Crime index, 1998 | 485 | 634 |
| Population diversity index, 1998 | 33 | 25 |
| % of unionized employees | 8.6% | 8.7% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 1.9% |
| Sound municipal management, 1999 | | C |
| Traffic congestion, 1996 | 1.09 | 1.01 |
| No. of days of pollution | 10 | 2 |

### COMMENTS

**Advantages:** Central location: 50% of the American population lives less than 500 miles from Columbus
Educated and docile labour force: 40 colleges, universities and technical schools, low turnover rate.
*"The increase in the productivity rate of Columbus area workers is double the national average."*
Diversified economic base: good business services sector, headquarters of CompuServe Inc.
Entrepreneurial value: 3,000 SMEs are created there annually and 80% succeed.
Large airport
Economy with a remarkable stability, secure from recessions
Low wages

**Drawbacks:** Tight job market
Large financial sector: financial corporations hit by the consolidations.

# COLUMBUS

## Non-residential

### LOCAL COMMENTS

Columbus has become more populous than Cleveland. One of the fastest growing cities in the American northeast.

Good performance expected in all real estate sectors. Foreign investment began in 1998. Some plans for 95 acres surrounding the Arena sector include housing, stores, office space.

A new law was just passed in Ohio: "*Any item made outside Ohio but stored in Ohio and then shipped outside the state is exempt from the state's inventory tax.*"

### INDUSTRIAL MARKET

Franklin County is dominant in the area. Job growth there is very significant. Industrial construction there is undergoing an exceptional boom, especially for warehouses. Distribution represents 80% of the industrial activity. Financing comes from the area's REITs.

In 1999, rentals increased 37% while new construction rose 63%. Of course, certain existing warehouses didn't have the size required by the demand, with a shortage of small warehouses, but a supply-to-demand surplus is still expected.

### OFFICE MARKET

Several large corporations like Sterling Commerce, Applied Innovation, Wendy's International, Ross Laboratories-Abbott Labs, Bank One, Worthington Industries, American Electric Power, Nationwide Insurance and The Limited have their head office here.

The renovations have a chain reaction effect on the downtown area. In 1998, these projects included the Smith Brothers Hardware Building, Nationwide Arena, the new Fifth Third Building, Bicentennial Plaza, and Moline Plow Building. In 1999, the renovations continued. The class A projects in the downtown area total 2 million sq. ft. and are located in the districts of the Arena, the Bicentennial Plaza II, the Brewer's Yard and the Miranova Corporate Tower. The same intensity is anticipated in 2000.

The suburbs are healthy. The new projects are rented as soon as they are built. Dublin, Polaris and Easton are the most prized. Easton Town Center is developing its entertainment and restaurants.

**Financing Data**

Financing sources: Insurance companies, commercial banks, pension funds
Financing supply: Ample
Capitalization rate: 9.8%

### OFFICE DATA BY SUB-SECTOR, 1999

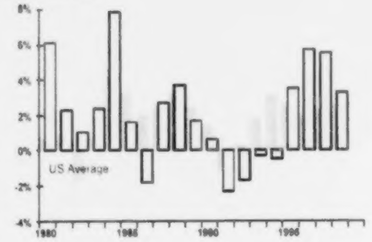
| | Class A | | Class B | |
|---|---|---|---|---|
| | Centre | Suburb | Centre | Suburb |
| Total inventory | 8,390,000 | 13,737,210 | 4,399,000 | 4,786,038 |
| Vacant | 280,000 | 605,264 | 132,000 | 404,710 |
| Vacancy rate | 3.3% | 4.4% | 3.0% | 8.5% |
| Vacant sublets | 60,000 | 30,000 | 32,000 | 0 |
| Under construction | 200,000 | 1,745,000 | 0 | 145,000 |
| Net absorption | -38,260 | 900,386 | -92,816 | -20,540 |
| Outlook for variation in sale price | Down 6-10% | Up 6-10% | | |

# SAN JOSE

## Residential

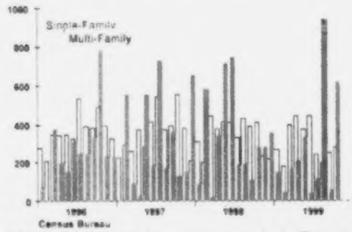
### LOCAL ECONOMY

**Job Growth**



| | US | San Jose |
|---|---|---|
| Per capita income, 1998 | 21,653 | 29,651 |
| Cost of living index, 1999 | 111 | 132 |
| Business diversity index, 1998 | 18 | 35.1 |
| Level of venture capital, $B 1999 | 71 | 793 |
| % of female managers | 37.9% | 38.6% |
| % of bachelors, 1998 | 23.3% | 32.4% |
| Growth in profess./managers | 0.3% | 1.2% |

### RESIDENTIAL MARKET



Census Bureau

The 1999 supply-to-demand deficit is estimated at 2,290 units.

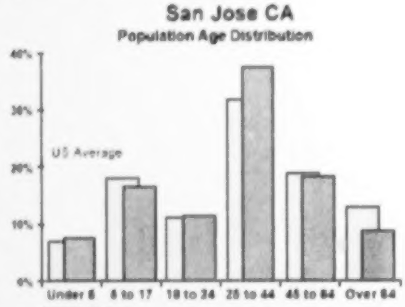
The cost of ownership is 4.8% lower than the cost o renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 29.9

Renting: 31.4

### DEMOGRAPHICS

**Population Growth 93-00: 8.5%**



Census Bureau

The population is very concentrated in the 25-44 age category. There is immigration of single persons who work there. Growth has been strong since 1996, but a slowdown can be felt.

Multiple housing constitutes 46% of total construction.

### BUSINESS ENVIRONMENT

| | US | San Jose |
|---|---|---|
| Number of direct flights, 1998 | 259 | 159 |
| Level of culture (best =100) | 83.4 | 95.8 |
| Crime index, 1998 | 485 | 306.93 |
| Population diversity index, 1998 | 33 | 64 |
| % of unionized employees | 8.6% | 12.4% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 4.9% |
| Sound municipal management, 1999 | | B- |
| Traffic congestion, 1996 | 1.09 | 1.11 |
| No. of days of pollution | 10 | 6 |

### COMMENTS

| | |
|---|---|
| **Advantages**: | Very educated and very well-paid labour |
| **Drawbacks**: | High-risk market: an economic decline is anticipated in this area |
| | Costs of doing business very high: exodus of manufacturing enterprises, labour very costly |
| | Excessive transportation time: they want to link Santa Clara to the BART system that serves Oakland and San Francisco |

**Note**: The economic base is very concentrated. It is the world centre in high technology. Consequently, the local economy is highly influenced by the recent fortunes in the manufacturing, and above all tertiary, computer industry. Semi-conductors suffered this year but the software and Internet companies are doing very well.

# FORT WORTH

## Residential

### LOCAL ECONOMY

**Jobs**

| Jobs | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 3.20% | 3.30% | 4.10% | 5.70% |
| Unemployment | 3.00% | 3.10% | 3.20% | 3.70% |

| | US | Fort Worth |
|---|---|---|
| Per capita income, 1998 | 21,653 | 21,164 |
| Cost of living index, 1999 | 111 | 98 |
| Business diversity index, 1998 | 18 | 13.5 |
| Level of venture capital, $B 1999 | 71 | 1 |
| % of female managers | 37.9% | 35.8% |
| % of bachelors, 1998 | 23.3% | 23.2% |
| Growth in profess./managers | 0.3% | 0.2% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Denton | 12.73% | 48% |
| Flower Mound | 12.71% | -21% |
| Corinth | 9.19% | 42% |
| Lewisville | 7.92% | -63% |
| Ft. Worth | 32.06% | -34% |
| Arlington | 25.39% | 63% |

The supply does not manage to fill all the demand needs. The cost of ownership is lower than the cost of renting and strong price increases are expected in the coming years. In 1998, the ratios of these costs to the median income were the following:

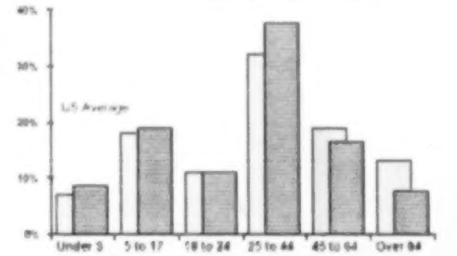
Ownership: 17.8
Renting: 21.7

It is also becoming a retirement community. *"Capital Senior Living Corporation is scheduled to join the action in Dallas and Fort Worth with The Waterford at Richardson, for independent and assisted living with an average rent of $1,700 a month."*

### DEMOGRAPHICS

**Population Growth 93-00: 14.9%**

Population Age Distribution



Census Bureau

Strong immigration of past few years that will continue. Average annual growth for past ten years:

Jobs: 3.2%
Population: 1.9%
Per capita income: 2.2%

Apartments constitute 28% of the new construction since 1995. Two large projects on several acres of serviced land are planned in the city of Justin in Denton County.

### BUSINESS ENVIRONMENT

| | US | Fort Worth |
|---|---|---|
| Number of direct flights, 1998 | 259 | 0 |
| Level of culture (best =100) | 83.4 | 80.2 |
| Crime index, 1998 | 485 | 357.66 |
| Population diversity index, 1998 | 33 | 5 |
| % of unionized employees | 8.6% | 3.7% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 0.0% |
| Traffic congestion, 1996 | 1.09 | 1.01 |
| No. of days of pollution | 10 | 6 |

### COMMENTS

**Advantages**: Growth still exceptional: involved in the B-to-B (business-to-business) market.
Low business operating costs, very reasonable housing costs
Lockheed, Bell Helicopter and American Airlines are some of the major companies.
Good location for some processing centres and sub-contractors
Good international airport

**Drawbacks**: Defence cutbacks affect them
Large proportion of durable goods that are manufactured there could make this economy vulnerable to the economic cycles.
Strong competition from other metropolitan areas in Texas

# SEATTLE

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 1.70% | 1.80% | 3.70% | 4.50% |
| Unemployment | 3.30% | 3.90% | 3.50% | 3.30% |

| | US | Seattle |
|---|---|---|
| Per capita income, 1998 | 21,653 | 26,285 |
| Cost of living index, 1999 | 111 | 122 |
| Business diversity index, 1998 | 18 | 9.8 |
| Level of venture capital, $B 1999 | 71 | 225 |
| % of female managers | 37.9% | 37.9% |
| % of bachelors, 1998 | 23.3% | 29.0% |
| Growth in profess./managers | 0.3% | 2.0% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99[%] |
|---|---|---|
| Island County | 2.53% | -2% |
| Seattle | 14.22% | 13% |
| King County Area | 14.06% | -7% |
| Bellevue | 3.73% | 13% |
| Kent | 3.39% | 90% |
| Kirkland | 1.95% | 49% |
| Bothell | 1.70% | 142% |
| Issaquah | 1.68% | 48% |
| Kitspa County | 4.62% | 1% |
| Pierce County Area | 15.02% | -7% |
| Tacoma | 2.76% | -11% |
| Puyallup | 1.38% | -32% |
| Snohomish County Area | 18.84% | 1% |
| Mill Creek | 2.59% | 575% |
| Marysville | 1.73% | 6% |
| Everett | 1.51% | -52% |
| Thurston County Area | 3.99% | 3% |
| Olympia | 2.43% | 179% |
| Lacey | 1.87% | 6% |

The supply meets the demand.

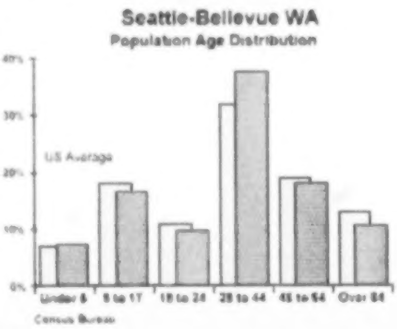
The cost of ownership is 24.3% higher than the cost of renting. In 1998, the ratio of these costs to the median income were the following:

Ownership: 28.7

Renting: 23.1

### DEMOGRAPHICS

**Population Growth 93-00: 11.9%**



Immigration declined in 1997-98 but recovered lately. The jobs lost in the aviation manufacturing sector (Boeing) were replaced by gains in the informatics sector. The category of households aged 25-44 needs apartments, which constitute 41% of the new construction since 1995. Lofts are the fashion.

### BUSINESS ENVIRONMENT

| | US | Seattle |
|---|---|---|
| Number of direct flights, 1998 | 259 | 225 |
| Level of culture (best =100) | 83.4 | 96.9 |
| Crime index, 1998 | 485 | 531 |
| Population diversity index, 1998 | 33 | 30 |
| % of unionized employees | 8.6% | 15.7% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 0.0% |
| Sound municipal management, 1999 | | B |
| Traffic congestion, 1996 | 1.09 | 1.27 |
| No. of days of pollution | 10 | 2 |

### COMMENTS

**Advantages:**

Access to the Asian markets
Excellent quality of life and low cost of living
Good pool of educated labour
Undisputable base of technology companies: Amazon.com, Microsoft, on-line pharmacy, Washington Software Alliance
*"An overwhelming belief on behalf of the local populace that software/Internet content are key to everyone's future"*

**Drawbacks:**

Economy dependent on the aviation sector and the markets of Asia.
Microsoft, the area's third largest employer, is being broken up; will the outsourcers take up the torch?
Increasing traffic congestion
High labour costs
Residential development too low for the newcomers
Incessant rain

# MINNEAPOLIS

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 2.70% | 3.40% | 1.90% | 2.60% |
| Unemployment | 2.00% | 2.40% | 2.70% | 2.70% |

| | US | Minneapolis |
|---|---|---|
| Per capita income, 1998 | 21,653 | 24,097 |
| Cost of living index, 1999 | 111 | 105 |
| Business diversity index, 1998 | 18 | 10.1 |
| Level of venture capital, $B 1999 | 71 | 37 |
| % of female managers | 37.9% | 40.6% |
| % of bachelors, 1998 | 23.3% | 27.0% |
| Growth in profess./managers | 0.3% | 0.5% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Henneppin County | 20.36% | 29% |
| Dakota county | 13.65% | 13% |
| Washington County | 12.28% | 17% |
| Anoka County | 11.99% | 8% |
| Scott County | 9.16% | 33% |
| Wright County | 5.88% | 27% |
| Sherburne County | 5.29% | 12% |
| Carver County | 4.55% | 11% |
| Ramsey County | 3.98% | 25% |
| Chisago[sic] County | 2.90% | 16% |
| Isanti County | 1.37% | 51% |
| St. Croix County | 4.36% | 24% |
| Pierce County | 1.46% | 6% |

The 1999 supply-to-demand deficit is estimated at 0.4% of the total inventory.

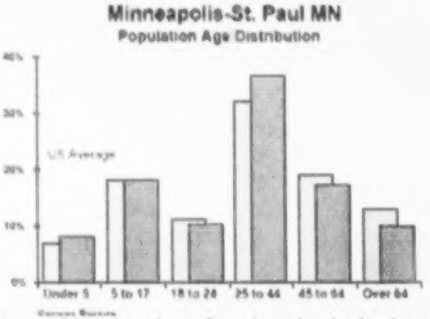
The cost of ownership is 5.3% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 21.9

Renting: 20.8

### DEMOGRAPHICS

**Population Growth 93-00: 8.4%**



Area of immigration of workers in singles households. Apartments constitute only 14% of the new constructio since 1995. In 1999, the price of homes increased 19% and rents 11%, which make rental housing more attractive. However, the popular rental housing is low density.

*"There are currently 24 multi-family projects which could add a combined 2,892 units over the next two years. However, even this pace of construction may not meet the growing demand by young professionals and empty nesters, who are renters by choice."*

### BUSINESS ENVIRONMENT

| | US | Minneapolis |
|---|---|---|
| Number of direct flights, 1998 | 259 | 315 |
| Level of culture (best =100) | 83.4 | 98.0 |
| Crime index, 1998 | 485 | 350 |
| Population diversity index, 1998 | 33 | 34 |
| % of unionized employees | 8.6% | 12.3% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 3.3% |
| Sound municipal management, 1999 | | B+ |
| Traffic congestion, 1996 | 1.09 | 1.12 |
| No. of days of pollution | 10 | 3 |

### COMMENTS

| | |
|---|---|
| **Advantages:** | Head office of major corporations (3M, Honeywell and Dayton Hudson) that offer work and opportunities to sub-contractors |
| | Superb educational system |
| | Diversified economic base |
| | Good venture capital |
| **Drawbacks:** | High property taxes |
| | Problems with qualified labour availability and high wage rates |
| | Shortage of land for new industries |
| | Lack of land zoned for high density and community resistance to high density |
| | High construction costs |
| | High cost of living |

# DENVER

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 3.70% | 1.80% | 3.60% | 4.50% |
| Unemployment | 2.20% | 2.50% | 3.30% | 2.80% |

| | US | Denver |
|---|---|---|
| Per capita income, 1998 | 21,653 | 24,791 |
| Cost of living index, 1999 | 111 | 113 |
| Business diversity index, 1998 | 18 | 17.7 |
| Level of venture capital, $B 1999 | 71 | 79 |
| % of female managers | 37.9% | 36.3% |
| % of bachelors, 1998 | 23.3% | 29.7% |
| Growth in profess./managers | 0.3% | 1.4% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| Denver County | 11.37% | -3% |
| Boulder County | 9.49% | -44% |
| Thornton | 8.61% | -14% |
| Adams County Area | 2.80% | 105% |
| Brighton | 2.57% | 159% |
| Northglenn | 1.46% | -51% |
| Commerce City | 1.25% | 1,088% |
| Arapahoe County Area | 8.45% | 27% |
| Aurora | 7.49% | 28% |
| Littleton | 1.70% | 92% |
| Denver County | 11.37% | -3% |
| Douglas County Area | 17.09% | 19% |
| Parker | 3.85% | -13% |
| Jefferson County | 7.77% | -26% |
| Greeley | 2.77% | 51% |
| Erie | 1.95% | -12% |

The 1999 supply-to-demand surplus is estimated at 4,923 units, or 0.7% of the total inventory.

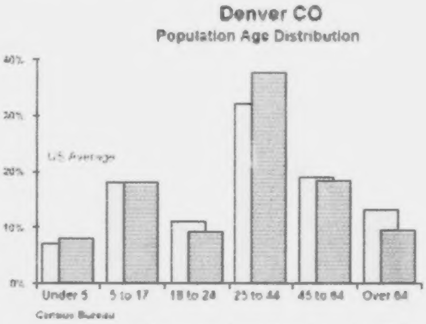
The cost of ownership is 22% lower than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 18.3

Renting: 23.5

### DEMOGRAPHICS

**Population Growth 93-00: 11.8%**



Denver CO

Population Age Distribution

Census Bureau

Area of strong immigration in the 24-44 age group associated with the recent exodus from California. This immigration is expected to continue.

Three major sectors of the economy are growing: transportation, business services and finances

Apartments constitute 27% of new construction. *"Prices have increased faster than income levels and th market is currently over-priced, making apartments more attractive. Home prices increased 23% in the past 24 months, a reflection of low vacancy rates, but possibly also due to a speculative bubble."*

### BUSINESS ENVIRONMENT

| | US | Denver |
|---|---|---|
| Number of direct flights, 1998 | 259 | 377 |
| Level of culture (best =100) | 83.4 | 90.7 |
| Crime index, 1998 | 485 | 274 |
| Population diversity index, 1998 | 33 | 15 |
| % of unionized employees | 8.6% | 6.9% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 1.4% |
| Sound municipal management, 1999 | | B- |
| Traffic congestion, 1996 | 1.09 | 1.12 |
| No. of days of pollution | 10 | 3 |

### COMMENTS

| | |
|---|---|
| **Advantages:** | New international airport<br>Good quality of life: outdoor recreation opportunities<br>Entrepreneurial spirit<br>Concentration of telecommunications companies<br>National immigration |
| **Drawbacks:** | Drastic shortage of qualified labour<br>Road and educational infrastructure used to full capacity<br>Area's competitive advantage undermined by the labour and housing costs<br>Urban sprawl in the suburbs:<br>Golden: backwards attitude towards growth<br>Jefferson County growing phenomenally with nightmarish traffic congestion and predictable hikes in property taxes |

# PORTLAND

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 3.00% | 2.00% | 2.40% | 3.50% |
| Unemployment | 3.80% | 4.60% | 4.40% | 4.20% |

| | US | Portland |
|---|---|---|
| Per capita income, 1998 | 21,653 | 22,738 |
| Cost of living index, 1999 | 111 | 114 |
| Business diversity index, 1998 | 18 | 11.1 |
| Level of venture capital, $B 1999 | 71 | 33 |
| % of female managers | 37.9% | 37.8% |
| % of bachelors, 1998 | 23.3% | 23.4% |
| Growth in profess./managers | 0.3% | 1.8% |

### RESIDENTIAL MARKET

| Total Permits by Area | Distribution | 98-99/% |
|---|---|---|
| Clackamas County Area | 4.87% | N/A |
| Wilsonville | 4.01% | 488% |
| Oregon City | 3.21% | 89% |
| Columbia County | 2.27% | 38% |
| Salem | 5.34% | -11% |
| Keizer | 1.86% | -38% |
| Portland | 17.92% | -4% |
| Gresham | 5.04% | -16% |
| Fairview | 1.87% | 116% |
| Polk County | 1.81% | -30% |
| Washington County | 23.76% | -35% |
| Yamhill County | 4.98% | 3% |
| Clark County Area | 13.27% | -12% |
| Vancouver | 9.80% | 28% |

Supply and demand are in equilibrium.

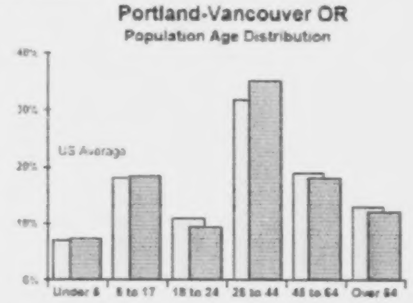
The cost of ownership is 6.1% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 24.4

Renting: 23.0

### DEMOGRAPHICS

**Population Growth 93-00: 11.3%**



Census Bureau

Immigration of young families with children is seen. The economic base comprises the business services sector, the electronics and aviation manufacturing sector and the international trade sector.

The construction of multi-family housing declined sharply in the past twelve months. The prices of homes have doubled in ten years owing to the immigration from California. This high appreciation made rental housing more desirable, but prices are expected to stagnate.

### BUSINESS ENVIRONMENT

| | US | Portland |
|---|---|---|
| Number of direct flights, 1998 | 259 | 216 |
| Level of culture (best =100) | 83.4 | 85.5 |
| Crime index, 1998 | 485 | 465 |
| Population diversity index, 1998 | 33 | 31 |
| % of unionized employees | 8.6% | 10.5% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 2.8% |
| Traffic congestion, 1996 | 1.09 | 1.16 |
| No. of days of pollution | 10 | 0 |

### COMMENTS

**Advantages:**
- Big city with a small town attitude: entrepreneurial spirit
- High technology sector growing very strongly: a great many outsourcers abound around Intel, the area's largest employer
- Venture capital is abundant
- Very large West Coast export port
- Excellent quality of life

**Drawbacks:**
- Chronic education financing problem
- Challenges to be faced to update the transportation and telecommunications infrastructures
- Shortage of labour for qualified jobs

# SAN DIEGO

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 3.10% | 1.40% | 3.80% | 5.40% |
| Unemployment | 3.70% | 3.10% | 3.80% | 4.40% |

| | US | San Diego |
|---|---|---|
| Per capita income, 1998 | 21,653 | 21,067 |
| Cost of living index, 1999 | 111 | 118 |
| Business diversity index, 1998 | 18 | 11.1 |
| Level of venture capital, $B 1999 | 71 | 137 |
| % of female managers | 37.9% | 37.8% |
| % of bachelors, 1998 | 23.3% | 25.9% |
| Growth in profess./managers | 0.3% | 1.5% |

### RESIDENTIAL MARKET

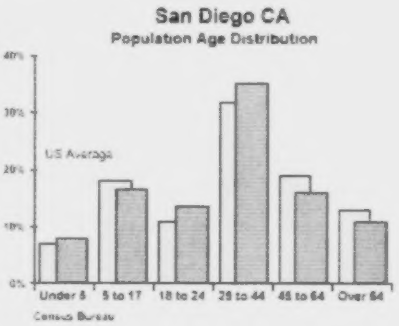
| Total Permits by Area | Distribution | 98-99 |
|---|---|---|
| San Diego | 30.93% | 24% |
| Chula Vista | 11.36% | 144% |
| Carlsbad | 9.94% | 70% |
| San Diego County Area | 8.97% | 39% |
| San Marcos | 4.12% | 123% |
| Oceanside | 2.90% | -4% |
| Escondido | 1.66% | -16% |
| Encinitas | 1.49% | 7% |
| El Cajon | 0.80% | 211% |
| Santee | 0.69% | 114% |
| Vista | 0.48% | -42% |
| Poway | 0.45% | -31% |

The 1999 supply-to-demand deficit is estimated at 9,057 units. The cost of ownership was 14% higher than the cost of renting in 1998 but this discrepancy shrank greatly in 1998-99. In 1998, the ratios of these costs to the median income were the following:

Ownership: 27.8
Renting: 32.6

### DEMOGRAPHICS

**Population Growth 93-00: 13.5%**



The size of the group aged 25-44 is related to the presence of the military and also to the immigration o young people into this area. It is very likely that this immigration will continue.

The prices of homes have risen 25% in two years, thereby favouring rental housing.

### BUSINESS ENVIRONMENT

| | US | San Diego |
|---|---|---|
| Number of direct flights, 1998 | 259 | 284 |
| Level of culture (best =100) | 83.4 | 90.6 |
| Crime index, 1998 | 485 | 546.44 |
| Population diversity index, 1998 | 33 | 42 |
| % of unionized employees | 8.6% | 6.8% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 4.9% |
| Traffic congestion, 1996 | 1.09 | 1.23 |
| No. of days of pollution | 10 | 15 |

### COMMENTS

| | |
|---|---|
| **Advantages:** | Pacific Headquarters for U.S. Naval Operations<br>Large engineering sector associated with the sizeable military presence in the area<br>Fourth largest biotechnology centre in the nation<br>The University of California intends to expand its engineering school |
| **Drawbacks:** | Housing and business operating costs very high<br>Port activities substantially lower than those of Los Angeles/Long Beach |

# AUSTIN

## Residential

### LOCAL ECONOMY

**Jobs**

| | 99-00 | 98-99 | 97-98 | 96-97 |
|---|---|---|---|---|
| Growth | 5.3% | 4.00% | 5.60% | 5.50% |
| Unemployment | 2.1% | 2.20% | 2.70% | 3.10% |

| | US | Austin |
|---|---|---|
| Per capita income, 1998 | 21,653 | 21,980 |
| Cost of living index, 1999 | 111 | 113 |
| Business diversity index, 1998 | 18 | 14.5 |
| Level of venture capital, SB 1999 | 71 | 81 |
| % of female managers | 37.9% | 41.0% |
| % of bachelors, 1998 | 23.3% | 30.8% |
| Growth in profess./managers | 0.3% | 0.8% |

### RESIDENTIAL MARKET

| Total Permits by Location: | Distribution | 98-99 |
|---|---|---|
| Austin | 51.75% | 6% |
| Travis County Area | 17.17% | 14% |
| Pflugerville | 2.79% | -1% |
| Lakeway | 0.58% | -19% |
| Sunset Valley | 0.00% | -100% |
| Round Rock | 22.15% | 45% |
| Georgetown | 5.51% | 55% |
| Thrall | 0.04% | -44% |
| Florence | 0.00% | -100% |

The 1999 supply-to-demand deficit is estimated at 1,870 units.

The cost of ownership is 10.8% higher than the cost of renting. In 1998, the ratios of these costs to the median income were the following:

Ownership: 25.7

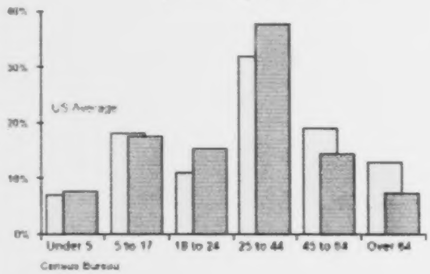
Renting: 23.2

### DEMOGRAPHICS

Population Growth 93-00: 15.6%

Austin-San Marcos TX

Population Age Distribution



Census Bureau

The expansion of the computer industry is very rapi and job growth continues.

Multiple housing constitutes 40% of new construction since 1995, which reflects the immigration of young single individuals. Eighty-eight percent of the population comes from elsewhere. This immigration should still continue and retail sales have not stoppe increasing.

### BUSINESS ENVIRONMENT

| | US | Austin |
|---|---|---|
| Number of direct flights, 1998 | 259 | 140 |
| Level of culture (best =100) | 83.4 | 64.1 |
| Crime index, 1998 | 485 | 392 |
| Population diversity index, 1998 | 33 | 28 |
| % of unionized employees | 8.6% | 1.5% |
| Corporate taxes -% state revenues, 1999 | 3.1% | 0.0% |
| Sound municipal management, 1999 | | A- |
| Traffic congestion, 1996 | 1.09 | 1.03 |
| No. of days of pollution | 10 | 0 |

### COMMENTS

**Advantages:** Good quality of life

Hospitable and inexpensive business environment

More than 1,700 technology companies, including 500 in programming: *"People are moving here to escape [Silicon] Valley--the congestion, the traffic, the pressure."*

One local developer has just acquired 1,240 acres of land to the east of Austin for a residential development including 3,000 multiple housing units and offices: Wildhorse Ranch. This site will be connected to the downtown by public transport.

**Drawbacks:** Traffic congestion

Without immigration, the growth of the high technology sector is not sustainable.

*"The labor market is tight, the region is coping with rapid growth, and many complain about the air service--the lack of frequent nonstops to other business centers."*

# IV- ANALYSIS AND ACCOUNTS OF CURRENT EXPORTERS' EXPERIENCES

In this chapter, we wanted to relate the experiences of the current exporters while preserving the confidentiality of their statements and their anonymity. The objective of the interviews was to validate certain major trends regarding the methods of penetrating the American market. We therefore placed the unaltered account of their experiences into an analytical framework. We will show you the differences in perceptions, while highlighting where their statements agree.

Typically, the involvement in the market and the vision of long-term growth differ not according to the sector (residential, non-residential, civil engineering), but rather according to the activities (management, design-construction, financing) and, to a certain extent, the type of client (consumers, businesses). In fact, even though each sector responds to distinct market forces and even uses different construction techniques and materials, the type of activities carried out made it easier for us to group the issues under a same heading. We will review these differences before dealing with the astounding similarity in the methods of entering the market and in the perceptions concerning entry barriers.

## 4.1 Sample of our Interlocutors

### 4.1.1 Size of the Companies

The Canadian contract construction industry is very fragmented and is composed primarily of a large number of small, highly specialized companies. In 1995, the industry comprised 20,000 general contractors and 107,500 contractors in specialized trades. Only 1% of the general contractors had earnings in excess of 20 million dollars, while 80% had earnings of less than $250,000. Among the specialized companies, only 4% achieved earnings of more than one million dollars.[61] The latter, however, had a lot of success in their exports because of their distinctive skill.

In the following table we provide a brief description of the interlocutors who kindly collaborated with the study. There is under-representation of small companies in our sample, which seems normal; the businesses engaged in exports are larger. Furthermore, we removed four refusals to participate, all from small businesses. "We do not want to disclose our tricks, " they said. Unfortunately, the semi-directed interview context is often as profitable for the interviewee as the interviewer, since there is an exchange of strategic information.

| Sales – in $millions | 5-100 | 225-500 | 500 + |
|---|---|---|---|
| Number of employees | 15-70 | 150 + | 400 + |
| | | | |
| General contractor | 2 | 1 | 2 |
| Design-construction | 3 | 1 | 1 |
| Ownership and financing | 1 | | 1 |

**Trends towards the consolidation of large enterprises**

A parenthesis here to position one of the large enterprises we interviewed. In 1990-1991, companies were forced to re-evaluate the accounting values attributed to their real property holdings. They suffered value losses and massive write-offs that plunged the industry as a whole into a loss situation from the end of 1991 to the end of 1995. The year 1996 is considered as the beginning of the recovery in the residential and commercial markets. This lengthy recession led to the disappearance of certain large corporations such as Olympia & York and the Campeau Corporation. The media spoke copiously of the experience of these large

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[61] Industry Canada, 1999, ***Construction***, Sector Competitiveness Frameworks Series.

Canadian real estate developers who, in the 80s paid the price for their failure in the foreign markets. The market is much more disciplined today and, to us, this era indeed seems to have ended.

Other large corporations capable of sustaining international-scale competition, such as TrizecHahn, asserted themselves as world-class competitors engaging in an active expansion through acquisitions and new projects carried out in the United States, Hungary and the Czech Republic. The mergers and restructuring that occurred at that time, such as the acquisition of Markborough by Cambridge Shopping Centres, resulted in corporations staffed with solid management teams highly skilled in obtaining funds and administering cash flow. The continuation of such mergers is to be expected, given that the corporations will try to increase their market share and rationalize their operations. One of them is experiencing that fate this year.

Established since 1917, Monarch, one of the largest home builders in Canada, also the owner and manager of a portfolio of non-residential buildings in Ontario, was deeply involved in development and land assembly as well as in residential construction in Florida, California, Georgia and Texas. The net earnings of the corporation increased 89% in 1999. "Higher prices are being achieved, most notably in the U.S., offsetting increased production costs. In the U.S., we are operating at the limits of our production capacity which is allowing Monarch to pursue a strategy of increasing prices, resulting in higher profits on fewer sales." However, on April 7, 2000, Monarch announced that its majority shareholder Taylor Woodrow Holdings of Canada, a wholly-owned Canadian subsidiary of a British corporation, is privatizing and taking total control of the corporation. Effective May 20, 2000, the offer was accepted by the other shareholders, two of which were institutional (Standard Life and Lincluden Management Limited). "Management of Taylor Woodrow believes that the completion of the offer will allow Taylor Woodrow to integrate Monarch more fully into its operations, better allocate capital and other resources and streamline operations in North America into one efficient management structure." [62] Among the most recent acquisitions of these two enterprises, land in Austin where a luxury community of 2,300 homes and 2,000 luxury condominium units is planned.

### 4.1.2 Definition of the Fields of Activity

#### General contractor

We wish to specify here the distinction between general contractor, design-construction and developer. Non-residential projects have always been carried out according to the traditional bid-construction method. Under this system, a project's drawings and specifications are the work of a team of design professionals (architects and engineers). The project is then submitted to a tendering process and it is the general contractor presenting the lowest bid who obtains the contract. The companies get together to build a specific project and then each goes its own way. In the long term, only a strategic nucleus of senior employees remains. By so doing, they limit their fixed costs. Very few general contractors provide the full range of services necessary to complete a full construction process (development, design, construction).

One large contractor mentions that, in the United States, the extent of finishing in non-residential buildings depends on the clients but, generally speaking, it is less important than in Canada. In our interviews, the general contractor was often associated with an American builder. The general contractor bids on already completed drawings and specifications, arranges to obtain the financing, follows the project throughout the process. He establishes the supply and delivery schedule for the on-site construction products, materials and machinery. His American partner purchases the materials, hires the specialized sub-contractors and coordinates their activities. He also performs the quality controls and ensures that the building code and other regulations are met. The sub-contractors supply specific services such as the site preparation, the structural work (in steel or concrete), the installation of the electrical and mechanical systems, etc. The broad responsibility for the construction remains that of the general contractor.

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[62] Canada News Wire, May 23, 2000, *Taylor Woodrow Successful in Offer for Shares of Monarch Development Corporation.*

**Designer-builder**

We are now witnessing an increase in the number of design-construction contracts. In these contracts, the owners specify the time frames and performance criteria sought within the context of a project. In response, the design-construction teams, which group together architects, engineers, contractors and even construction material suppliers, submit proposals showing the concept, costs and date of completion. In the course of this first phase, the architect and the engineer also prepare the support documentation used to market the proposal to the much sought-after financial agents and to the government authorities participating in the approval process. These contracts allow the owner, early in the process, to obtain firm prices, to have a single point of contractual accountability, to reduce his supervision. Once the agreement in principle is obtained from the financial institutions and the approval bodies, the designer-builders establish the details of the drawings, the specifications and the cost estimates.

Some case studies in both the United States and Canada have allowed for showing savings of 15-18% in time and 12-14% in costs. For the builder, these proposals are costly to prepare, often representing a third of the project design costs. The builder must also assume a greater uncertainty factor regarding the proposal evaluation process and a large number of responsibilities previously shouldered by the owner. The real estate developer found primarily in residential construction can also assemble the land and is involved in the sale.

**Building owners/managers**

The responsibility for the project's operation and maintenance is normally transferred to the owner. The owners often call on internal resources to manage their property and to look after repairs and maintenance. However, in the course of the last few years, recognizing the complexity and the cost of these functions, many owners have begun to sub-contract these responsibilities to specialists in the construction and property management industries. They even relinquish their buildings and the building managers act as the owners of them.

## 4.2 Motives for Exporting: Survival and Growth

Before dealing with the differences of vision between these three types of exporters, we once again place you in the global context that motivates their incursion into the American market. We mention right away that it is estimated that less than 1% of the earnings of Canadian contractors come from international projects.

In general, all of the builder-exporters we interviewed want to intensify their activities in the United States. We can therefore conclude that their first experiences were promising. It must be said that in the 90s, the industry suffered the longest period of stagnation since the crisis in the 30s. Government budget cutbacks, the over-capacity accumulated during the 1980s and the weak economic growth hit the Canadian real estate market head-on. Still today, a large part of the buildings the Canadian economy needs for its growth is already built. The Canadian market is so narrow that the risk associated with the demand does not allow any way out. We also mention that working in the South allows operating during Canada's quieter winter months. The diversification of activities in the United States has made it possible for several to expand the demand, especially starting in the 90s.

Once entry is achieved, those who succeed well in the United States want to grow there. "The issue of why a construction firm successful in one area succumbs to the urge to set up shop in another locale is, it seems, a human response to success. The impulse to grow, to extend one's scope, is as old as the hills, yet the nagging thought exists that what might work in one geographical location might not work in another."[63]

## 4.3 Differentiated Activities and Vision of the Interlocutors

### 4.3.1 General Contractor

One of the largest contractors works in building laboratories. His biggest clients are government agencies and universities.

In the long term, he wants to intensify his activities in his current offices and, for him, two years is long term because things change too quickly and it is continually necessary to adjust. He wants to get closer to his clients, improve his network and be more involved with the local architects and consultants. One thing is certain, it is not because Canada is experiencing a real estate boom that he is going to reduce his involvement in the American market, otherwise everything have to be done again as soon as the Canadian market weakens. He would like to build office buildings and shopping centres. It is true that *design-built* is the most profitable and he would someday like it to form 20% of his sales. He is giving himself five to six years to get there. Another is being solicited at the present time in the Chicago market. In the meantime, he wants to consolidate his position in Florida where his office is located and expand his business down there. His American partner would like him to be more aggressive in growth but his Quebec projects have doubled in two years and he lacks resources. One must be disciplined and penetrate the market slowly to avoid sinking like a rock. He doubts that a small firm with 40 employees has sufficient resources to set up properly and survive in the United States. Furthermore, he has a hard time seeing how an association with a small firm could bring him the additional human resources he needs to set up in the United States.

For another large company, the criteria of choice for growth are: a very strong market, the level of competition and the quality of the resources available within the company to penetrate that market.

Another smaller one is very pessimistic concerning the growth of its activities as a general contractor. He wishes instead to become designer-builder-owner-manager. He does not believe that the profit margin sufficiently covers the general contractor's risks. According to him, such an operation is not really profitable or sustainable because it is basically an indistinctive offer of services. Neither can the product stand out in terms of energy efficiency, for example. American builders are as competent as builders from here.

He accepts to bid on projects only if the market is shrinking. "If the market is growing, you submit a bid and then at the time of the implementation your sub-contractors and materials cost more than anticipated and you always lose." He could not form an alliance with some Canadian general contractors because basically their interests do not converge: they build by bids and that is not what he wants to do.

According to a "bold" smaller builder, the decision criterion for deciding to export would be the shortage of supply to demand. At the present time, he is contemplating an expansion program in the United States. This SME does not believe it can make a complete preliminary review of the American markets. Instead, it intends to commit to a business opportunity based on which it intends to do everything to pursue the extension of its activities in the region, with the specific goal of remaining in the market. It would open a solicitation office there. It wants to target one or two states where demand exceeds supply.

Two of the smallest builders mentioned that they would contemplate an association with a larger Canadian builder for their American development. One wants to keep his foundations here. If he had to expand his activities into the United States, he would go into real estate development by forming a partnership with an American builder and a local broker. He does not think that he would set up there as a builder. This time, he would open a small permanent office with a project: the manager would then take advantage of the project to know the local market and familiarize himself with the culture.

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[63] Degroodt, Jesse, 1999, *Firms work, set up offices in other states to grow business*, in Focus: Construction.

In the other case, the product is basically industrial and finishing is complete: he makes turnkey buildings. This is, moreover, his expertise. But he is not in the competitive bidding market and would not see himself being so. It is not his added value. He prefers finding a Canadian client and offering him a product modelled on the client's specific needs. Founding a typically American construction company is too difficult. "An intimate knowledge of the local market, sub-contractors, labour, codes, financing methods and networks is necessary in order to succeed." This is what his American partner brings to him. For him, it is too difficult to completely change course to set up down there. Expanding his activities into the United States would mean founding a subsidiary independent from the Canadian parent firm.

### 4.3.2 Designers-builders

The builders working in the residential domain generally use this strategy. Some of them even assemble land and might instead be classified as real estate developers. Monarch mentions: "In 1992, the sales were distressed after the Savings and Loans story and we saw an opportunity to buy land at low cost."

Another interlocutor puts all the *design-built* offers exceeding 20 million posted on the Internet through a fine-toothed comb. He has a team of engineers who perform value engineering and guarantee the price the client wants and then make the design. He made a bid this way for the US Postal Service in Ohio. According to the NAFTA rules, the Americans had to consider his bid. The technical performance and the price they offered were very competitive. However, on the one hand, the local construction firms have an obvious competitive advantage since they have in-depth knowledge of the local conditions (regulations, markets, labour, land, climate). On the other hand, the normal opinion is that this work should still be entrusted to some local firms. Admittedly, the various agreements have allowed progress in the matter. However, if public or institutional financing is associated with the project, there is often enormous pressure exerted for the project to be structured and designed to maximize local participation. And we have this attitude in Canada as well.

One large company also mentions that the higher the risk involved in the project, the more significant the profit margin is. Hence, his *design-built* projects are more remunerative than his traditional projects. Furthermore, the competition is less intense for such projects that are more complex to manage. Specialization reduces competition. This firm now specializes in building high technology buildings. The qualification required of the employees doesn't really change. However, the manager must acquire the expertise for supervising the work site. ("Clean Rooms") and must include all of the issues related to decontamination. In fact, the employees must undergo specific training.

Two specialized firms do interior finishing for all types of buildings and they work across the country. One of the commercial design firms does business with a large national commercial network that has regional representation. It also mentions that with such a national client, the business culture is more global, less local. Such a client is accustomed to working outside his city and is more accepting of working with a Canadian. "It is difficult to understand why the American service companies do not acquire more Canadian firms. Considering our wages and the exchange rate, they would save 50% in operating costs."

The other firm set up in Seattle, Denver, Albuquerque, St. Louis, Chicago, New York, Boston and Orlando. It is therefore learning to work everywhere in keeping with its means, without spreading its efforts too thin. In the long term, these two firms intend to triple their turnover within five years and we wager that they will succeed because of their distinctive skill.

### 4.3.3 Building Investors, Owners and Managers

One of our interlocutors engaged in construction is also involved in a real estate firm and has an office in California. He owns an inventory of 3 million sq. ft. down there. Real estate opportunities are identified there and buildings are basically purchased for resale. Real estate liquidity is much higher there than here. Purchases are made according to pre-established criteria at a given price, then re-sold again according to some pre-established criteria at another given price. Here, long-term value must instead be created because it is difficult to sell a building portfolio in Quebec; there are not many buyers and sellers.

Another real estate company actively invests in office buildings in the United States. It is looking for a return on and diversification of its portfolio. It defines itself as an opportunistic buyer. It takes possession of the building, makes a few modifications if necessary and changes the tenants, for the purpose of renting 100% of the building. It is therefore a building owner and manager.

It reviews up to 300 investment proposals per year. These proposals come from brokers who solicit them and personal contacts made over the years. Moreover, thanks to the Internet, it has access to market studies by CB Commercial, Colliers, Wheaton, etc., not counting the listings. In the case of new markets or partners, some very useful preliminary information is obtained. The Internet facilitates the operations.

For another interlocutor, his first choice in the type of activities in the United States would be to carry out *design-built* projects and to manage them as co-owner with a Canadian partner. He is currently working very hard to make some agreements and achieve this vision.

## 4.4 Client Relations

Usually you start small. A partnership with a smaller company. In a single market. You develop relationships there. "When you get approval for a project, you get to know the people, you learn about the other properties, the competition, the opportunities." Afterwards you can stretch your tentacles into neighbouring areas. There again it is necessary to form associations with some local partners who know the area, necessary to take on quality labour in whom you can place your trust.

In the residential domain, each area has its own culture, architecture and market laws. "The architecture of every site is different. Even in the state of Florida they appeal to different communities and customs. In Jacksonville, they build lumber timber frames and houses are insulated. In the South they build block frames, masonry. The homes are second and retirement homes for people living in the Northeast of the country. In Boccaraton, they build for high-class Jewish communities. In Georgia the market is quite traditional: brick with 2X4 framing. In North Carolina, they have homes with a Cape Cod look, porches in the front. Naples in the west coast looks like a European community."

One also says, "The buyer is more informed than here: he has moved often in his life, he buys every three or four years and has seen a lot." The market is very easy to determine. In eleven years, they expect that the population of Florida will have doubled. His clients are not senior citizens. This era of immigration seems to have ended in Florida. His clients are Stock Exchange millionaires who work in high technology and who travel a great deal between New York and Florida. Because of this mobility, they do not want to be burdened by property maintenance. Their average wage is $170,000 a year. In Florida, there are ten times more buyers for his product than here.

Although one of our interlocutors, who works in the industrial and office sectors, mentions that in the residential domain it is necessary to be positioned more specifically in each of the cities, it would seem that client relations in the non-residential domain also require a local presence. One of the large builders questioned established himself in the United States in 1989, in Seattle, with some small projects. Now he has three offices: one in Michigan, another in Georgia that also serves both Carolinas, and another in Florida. He has set himself up in three different offices to be able to be closer to potential clients. But these three offices are under a single American sign. He wants to expand the operations of these three offices and there is enough of a market not to stretch his activities and spread his efforts too thinly in other states. Michigan was chosen because of its proximity to the head office in Canada. But it is a very difficult market. In Atlanta, the 1996 Olympics provided a business opportunity. In Florida, he is a partner with an American business development firm.

The majority of the companies feel that their distinctive skill as compared with the Americans is the confidence that the client can have in them considering their highly competitive price. They consider themselves as having an extensive skills background and a reputation for loyalty towards their clients. Some are already accustomed to working on three continents, without problems adjusting to the cultural differences.

There is actually so much work in the United States that good managers and construction project superintendents are hard to find. One of them says that he offers management skill and quality construction, which is hard to find because the American market is too strong at the moment. Our companies therefore offer services of a rare quality. Canadian builders are experts in the organization of their work sites: the schedules are met, the construction start delays are reduced to a minimum and the overhead remains very low. They operate with the least possible staff to complete a project. The most active in the market win contracts because they are the lowest bidders. One of them even mentioned that it is difficult to understand why the American service companies do not acquire their Canadian competitors. "Considering our wages and the exchange rate, they would save 50% in labour as well as operating costs." One of the interlocutors even mentioned that, actually, he sells his brainpower.

In the residential sector, the problem is more complex. Modifications to the Canadian product are essential, not only for the purpose of complying with the standards but also because the American is above all seeking the basics, i.e. floor space. In general, the modifications have allowed for improving the soundness of the product. One of them mentions that the construction of his two new rental housing buildings in Greensboro and Charlotte is luxurious and the clientele there is highly mobile and informed: a turnover rate of 70% is common. These clients are newcomers to the area and rent while waiting to find a single-family home to their taste. The product must remain conservative, in line with the standard American product. It is possible, however, to make certain refinements. On the other hand, clients in the American Northeast would be closer to our demands than those in the South.

One interlocutor gave a specific example of developing, building and promoting a condominium project. He was well situated and the product was well aligned with the clients' expectations. However, an American competitor built a similar project on the neighbouring lot. He was offering fewer amenities and reduced his sale price by 17% to sell it quickly. He could afford this dumping because of his very large size. It was a year before the Canadian project was sold. If we do not put as much zeal ($ and personnel) as the Americans into the sales and marketing strategy, the product doesn't sell/rent. Usually, we deal with a local real estate firm paid on commission. The builder then supplies a model apartment. Another interlocutor corroborated these statements. The American builder is very efficient and it is difficult to compete with him on mid-range price projects. All of our interlocutors build luxury condominiums in very wealthy communities. "We research competitors and offer a different more discriminating product."

One of the interlocutors was very specific concerning the relationship with the client and we pass on a few of his comments here:

"To lay the foundations for your market development strategy, you must get close to the client, understand his problems, abide by his culture and his dreams, and build a project that strengthens his corporate identity, his banner, while also respecting his business constraints. The more unusual and innovative aspects a product contains, the more important research and development are, the more its specificity and added value can be sold. To penetrate and grow in the American market, you must develop a specific expertise. Americans are admittedly conservative but they are also seduced by the difference as long as you are capable of leading them along while building their assurance. In this aspect, the West Coast is bolder than the East Coast. On the East Coast, New York and Boston are more avant-garde but also more straight-laced than the West Coast. In the Mid-West, being daring has a price. You must therefore be selective about small clients and, in a certain fashion, share the same vision.

Once trust is established and the project is up and running, visible presence and personal contact are essential. Communication and the frequency of contacts have several benefits: they indicate that we favour this client, they also allow us to assist the client in evolving at the same time as ourselves and settling the problems jointly as they arise."

## 4.5 Triggering Element of Entry into the Market

Among many small builders who commenced their operations in 1994, the sluggishness of the real estate market in Canada was the main reason mentioned for involvement in the American market. Some Quebeckers also mentioned the sovereignty context, others mentioned the extent of the black market, while others mentioned the implementation of the GST/QST.

Some, however, started there by random circumstances and encounters. They called it a business opportunity. For example, one first incursion into the United States was the result of an encounter on a sailboat, and in another case, because a friend was going to set up in California. In 1998, when the American supply in Virginia could not meet the demand, an American real estate developer, one of whose shareholders was originally from Montreal, approached one of our interlocutors with a business opportunity. Afterwards, they completed another project together but have not pursued their relationship.

For some, entry into the United States was incorporated into the company's strategic plan. One of them studied *Builders* magazine and defined three of the most interesting American areas, those where immigration existed. He then sent an emissary to collect documents on the number of permits issued, documents from the chambers of commerce. In one case, the firm hired three interns to review all the American markets.

For four companies, it was a Canadian client who initiated the incursion into the United States. They respond to requests from Canadian clients who have to open branches or factories there. This is the way one very large firm penetrated the American market twenty-five years ago, by responding to the needs of a large client. In fact, this client set up in several areas and this is how the construction firm learned to know and become familiar with these areas.

For another small company, its Canadian clients open distribution centres in Florida for their exports to Latin America. Its real estate development work there is consequently very sporadic. It is associated with an American firm managed by a former Canadian partner in the firm here. This partner set up as an American industrial and commercial construction firm and works in Florida. If the project costs more than anticipated, the Canadian contractor notifies his Canadian client that it will cost him more. The Canadian builder's only advantage is perfect knowledge of his client, his needs and his architectural design specifications. He therefore does not really consider himself an exporter.

In the other case, the Canadian client asked him to accompany him to a meeting with his American partner. During this meeting, his American sister organization presented its concept and it was a fiasco. The discussions resumed in Montreal and he was able to promote his concept during this meeting in a relaxed atmosphere. He then had a carte blanche from the American partner. The introduction to the market was the result of a combination of luck and charm. With his projects, he sealed his position with his client's American partner. This partner even registered him on the list of reputable suppliers for commercial firms and real estate developers. Today, 40% of his sales stem from the United States.

The third company set up in the United States more recently (1996) and its operations have not really grown since then. Its American operations basically meet the needs of its Canadian clients who want to set up in the United States. Through these alliances, it has built industrial buildings in Boston, New York State, Charlotte, Atlanta, Vermont, Tulson (Arizona) and in Florida. At the present time, it is working on two American projects and offers them long-term leases. With the *lease-back*, it retains control of the building and can make a better profit than as a simple general contractor. It is well aware, however, that it cannot use this means to grow continuously in the United States. The planning for its American growth cannot rely on the random needs of its Canadian clients. This company does not really regard itself as one that operates in the United States.

### 4.6 Commencement of Operations

For some small builders, market analyses allowed them to dream and even to circumscribe a large region in which to invest: Sun Belt and Research Triangle are mentioned the most. But for all, in-the-field prospecting allowed them to strengthen their beliefs and was much more effective than the market analyses for finding where to invest. The market opportunities were immediately visible.

One of them went to look around several times, saw the construction projects evolving and the new subdivisions. He asked the real estate agents many questions about the provenance of the clients, immigration, the neighbouring subdivisions, access to work, schools and services. He visited neighbouring competitors' projects, videotaped some work sites to see how they operated, spoke to a lot of people to absorb their customs. He met with bankers, brokers, real estate investors... Others first set up through a very small project, before making a first construction start, which allowed getting to know the market operations better, surveying the land examining various windows of opportunity: types of growth jobs, types of households, laws.

Development in the United States is a more exciting adventure than expected. The market is larger and some mention that the profit margins are better than here. One of them mentions that the profit margin in the United States is in the range of 6 to 8% while here he estimates it at 2%. Another very specialized builder mentions that this trade is very profitable with extremely high profit margins and phenomenal growth because of the uniqueness of his product. Another mentions, "They also make a better construction profit than up here, where the GST was detrimental to the construction market in Canada." Another says the same thing: "The profit margins in the United States are double those here. Here the taxes eat into the profits too much. There he can make a 10 million profit on an equity of 5 million."

On the other hand, another mentions that the profit margins are similar in the United States and Canada. He has, however, heard rumours that the very large Canadian general contractors who work in the United States are not making a cent down there, even if their operations there are very large. Actually, one large company mentions that its profits margins are lower in the United States than in Canada. In fact, they were zero for a very long time but now it is making some profits there, and for several reasons. On the one hand, the market is much more competitive. It is also more litigious. Lawsuits are common practice. Especially with one's sub-contractors. Thirdly, a bad project can erase the profits from five good projects. Often, at the time of penetrating a market, the market's good clients already have preferential relationships with good builders. Consequently, the potential clients are more marginal players in this market and also more difficult. It introduced much more discipline, firmness and strictness to reach specific profitability objectives. It wants to reinforce its privileged relationships with national clients. Fourth, it had not invested enough in the quality of its managers. It has reorganized and has been profitable since then.

Development in the United States is therefore a more demanding adventure than anticipated. Indeed, it is necessary to go to the work site frequently. Those who have managed to survive travelled often. The builders must deploy a great deal of time, front-end expenses and energy to pursue their activities because, even if the market is active, the competition is fierce and the American builders are well organized and stand behind each other. Among the small builders, this time implied destabilizing family life. Among the more mid-size, one mentioned that insertion took three years and required $500,000 at the outset. Another says, "To build in the United States, you have to spend a year soliciting and invest $250,000 cash at the start." He formed an American company and obtains his financing from American banks there. Another also mentioned a year of soliciting.

There is thus a great deal of preliminary work to be done, especially at the legal level: obtaining licences, initiating the joint venture, guaranteeing the financing, reviewing the proposals... Furthermore, one must open an office, put together a team, make contacts and estimates, etc., not counting that this is a long-range endeavour.

### 4.7 Physical and Cultural Proximity of the Market

For some, the physical proximity of the market is defined by the number and possibility of direct flights, as well as small time differences. One chose Florida, a question of temperature and time difference. Moreover, the flight is direct and only lasts three hours. One contractor mentioned that in his opinion, "The contractors' destination is a function of the direct flights available from their origin." Two said that if there were more direct Montreal-Tampa flights they would go. Miami can be done the same day. Baltimore is annoying because the flight is not direct. From Quebec, California is the most difficult state, not only because of the transportation but also because of the time difference. Another indicates that to go to Charlotte, which at that time was seen as a very good market, you had to take three airplanes. Orlando thus appeared to be the most obvious market. Furthermore, Jacksonville and Tampa are an hour by car from Orlando.

The business culture is also a proximity factor. One attempted to go elsewhere, to the Middle Eastern countries. He was approached to build in Beirut. On the one hand, the mentalities differ. The word or the signature of the authorities is not to be trusted. There are no laws that protect the investor. You can invest up to a million and have it all taken away by a new spokesperson who says that the other one did not have the signing authority. In addition, there is a lack of materials and labour.

The business culture in the United States is quite different from that of Canada. The American worker is less loyal to his organization, more mobile. The turnover rate is a problem. It is therefore more difficult to build a sustainable business base there than in Canada where the employees seek job security and comfort.

Even within the United States, the mentality also differs. In the South of the United States, a greater proportion of the labour force is not unionized. Consequently, labour is less qualified and requires more supervision. One exporter mentions that the North and Centre of Florida are easier and more disciplined markets than the South. Two other interlocutors mentioned the same thing. "In the South, there are traffickers, resellers, unethical dealers. The quality of the construction is not as well recognized." Another mentions that the workers in Miami are slower than here. But there are a lot of opportunities: it is the gateway to South America. Another interlocutor speaks of the distinction between the mentalities depending on the clients. Hence, the municipal authorities were defined as difficult clients by two interlocutors. The California and New York regions were also defined as difficult. New York because the unions there are very strong and constitute a heavy burden. For another interlocutor, the regional market targeted is not specific. Everything depends somewhat on the partner. He formed a partnership in Charlotte, but the partnership didn't last because the partner was too local.

The proximity of control is also mentioned. One interlocutor says that setting up in the United States does not take any real effort. He has an American front in Florida and operates out of this subsidiary. Three people work there basically to identify business opportunities. But he wants to keep the control of decisions here. The proximity of control is very important to him. In Florida, he works with an intermediary who is a former Canadian. The Florida market alone does not excite him. He wants to send his American head office to Atlanta because you can travel through there rapidly and directly by airplane to everywhere in the United States. He wants to set up a marketing development team there to develop a contact network, find clients and put proposals together. He would never go to New York where the entire real estate domain is controlled by the Mafia.

In conclusion, the proximity of culture implies reduced preliminary expenses as compared with an overseas development. "If architectural design varies from one place to another, doing business in North America is doing business in a known and common cultural and legal environment, one based on thrust and honesty. Speaking the same language in business makes it easy to do business."

## 4.8 Strength of the Partnership

As a general rule, the exporters interviewed operate through subsidiaries. Given the importance of having a dynamic local presence, many choose to forge alliances with local firms. This manner of doing things is not limited to small or large enterprises. Without exception to size or type of activity, all of the players state that the alliances are necessary to remedy the Canadian builder's weaknesses in the American market.

All but one. He has been set up in Florida since 1976. He has thought of going public. He has thought about alliances, but the average life span of a Canadian exporter in the United States is eight years. They do not know how to operate, take too many risks and plan their projects poorly. Alliances and shareholders were deemed too much trouble for nothing.

Another very large one uses joint ventures to distribute the risks in large difficult projects. Some of his joint ventures continued over into other projects. But, as a general rule, his partnerships are related to a specific project. The partner is chosen according to his expertise, his financial health and his political network. However, he bought a firm in California because this market is the most difficult in the United States. The merger was difficult to manage culturally.

Among the others, an American partner is sought initially to overcome certain entry barriers, especially obtaining licences and product compliance with local codes. Without this partnership, the front-end costs are too high. The partner is also found to be useful for making all the representations in the market: financing, inspectors, clients... Generally speaking, the Americans seem loyal and you can rely on such an alliance for work site supervision.

For one of the large builders, partnership offers direct access to clients and sub-contractors but there is always the drawback of cultural differences to be settled. He met his partner for one of his American regions only by coincidence. One of the partner's senior employees was Canadian. This partner wanted to grow. This partner worked solely in hotel construction, while he himself covered all the non-residential sectors. The partner offered, above all, access to good sub-contractors. Today he is responsible for developing the clientele and making contacts.

Another cites the way he went about finding his partner. He wanted to form a joint venture with a small American builder, smaller than he was. He knew some lawyers down there and asked them to recommend five small builders with whom there might be a partnership possibility. He chose two of them, met them and formed a partnership with the one who seemed the closest to his firm's culture. He hopes that this partnership will grow.

In Florida, another builder is a partner with an American firm, also smaller than he is. For yet another, the negotiation process to find an American construction partner lasted five to six months before the first groundbreaking.

For another small builder, his American real estate development work basically satisfies the needs of his Canadian clients. He offers his American partner a project manager and a work-site superintendent. He holds teleconference site meetings once a week. The partner takes care of looking for land, labour and materials and he also puts the bridge financing in place.

Another had worked with several American sub-contractors but was never satisfied with the service. Then, one of them did the work quickly and performed well. He explored different ways of collaborating with him and they agreed that a full integration was the best solution. He considered that this partner's activities contributed to the distinction and credibility of his product and were part of his distinctive skill. Since then, the partner, who was much smaller than he was, has increased his sales eightfold. As soon as a client gives him the opportunity to build some expertise, he invests in his labour force and thereby expands the scope of his specialties and distinctive skill.

This designer-builder prefers to fully integrate his partners into his organization by buying them. With a strategic alliance, you have to manage the respective identities of the organizations, see to the culture and image congruence. This management encumbers the process when it is necessary to facilitate communication with the American client and appoint a single spokesperson for him who assumes all the responsibilities of the file. He would not want to assume responsibility for a product if he does not totally control all of its aspects. His distinctive skill is his focus on managing the identity of his client.

It would seem to be true that in certain cases, however, the partnerships did not last. One American developer, one of whose shareholders was originally from Montreal, approached a Montreal company for a business opportunity. They completed another project after that but did not continue.

In another case, a joint venture was formed with an American company. Everything was going well. Then the Canadian company incorporated alone in the United States. It won a bid but after the work, there were very costly lawsuits by the client. The case was settled out of court after several years of deliberation.

In another case, they mention that there is no question of venturing into the market without an American partner. The firm creates companies by joining forces with American firms. It joined forces with a partner in Charlotte, but the partnership did not last because it considered the partner to be too narrow and local. In another case, the partner simply withdrew from the real estate market. It formed a partnership with a Canadian firm and an American assets manager. This association seems to want to grow. They are contemplating a second project in Dallas.

## 4.9 Resources

### 4.9.1 Information on the Markets

Two mentioned keeping abreast of the trends by subscriptions to such magazines as *Landauer* that point out the markets presenting the greatest potential for return. They concentrate their energies in one region because then they develop a good information network and know where to find specialized studies.

Another gets involved in the community by becoming a member of the local builders' association. These associations provide a lot of information without difficulty. One must not try to reinvent the wheel. By slipping into the community with a low profile you obtain all the information you need.

Another states that they do not have to do a lot of networking, do not belong to the builders' association. They keep abreast by reading the local newspapers.

One small builder mentioned to us: "In entering a market, it is pointless to consult the statistics; they lag behind the market. To find a niche, you have to wander around on site to see what is going on, examine how the projects are selling, what is selling..."

### 4.9.2 Land

Access to land is a large issue. But one of the interlocutors says he simply goes through brokers who are pleased to help him.

Another, who wants to expand his activities in the United States, sees that his American competitors have the means to develop real estate on the basis of land assemblies. He would like to know them and join forces with them to develop part of these lands. The large American contractors can afford to take risks and carry out dumping if necessary.

"In fact, in the early 90s an Ontario company (Markborough) bought and developed a land holding in Florida: it invested 60 million for the layout of drains, a lake... Then it looked for ten residential builders, offering each of them a specific market niche. In all, the project comprised 4,000 housing units. Out of the ten builders, seven were Quebeckers, most were Quebec Jewish builders. The American builders did not have confidence in the concept and the Ontario builders are less daring and entrepreneurial than the Quebeckers." In spite of everything, he does not want to assemble land. It is not his distinctive skill. He is primarily set up in northern Florida: Boccaraton, Fort Lauderdale. He buys parcels of land already assembled. In southern Florida, the land prices are too high. The market is perilous and can become saturated.

There have also been rumours of contractors from here who might be assembling land in Carolina. We mention that in the residential domain, Monarch & Taylor Woodrow are land assembly specialists.

### 4.9.3 Financing and Taxation

The general contractors typically operate according to a system where the fixed costs are extremely low in relation to the size of the projects undertaken. The contractors use credit from banks and suppliers to finance their operations. Often, they rent their equipment or even finance it through a moveable hypothec. Without a large equity base, they protect themselves with performance bonds to limit their risks. Most of their workers are hired on the basis of one project at a time.

Even though the lenders were sorely tested by the real estate crisis, the majority of the companies have no problems obtaining local financing. Better rates are obtained with a higher debt coverage: 35% equity is the standard. But in 1999, financing was approximately 50 basis points more expensive than here. Not counting that some took exchange coverage risks. An anecdote here of a small Canadian builder of a seven-storey building, 90% of whose condominiums were sold to Quebeckers. But he was mistaken. In actual fact, he bought his land at US$0.88 and the marketing of his condominiums occurred at the time when the exchange rate was US$0.72. He had to lower his asking price in order to sell. For the others, an American operation has American costs and revenues with the result that no exchange rate risk is really taken, except on the assets marked in American dollars.

Equity was mentioned as a condition for success. Another interlocutor uses his equity and does not need bank financing for his internal operations. It is through his network of professionals that he accesses financing for his performance bonds (*non recourse*, based on his leases). His development team in Florida is in touch with some development banks with whom he easily finds financing. He also obtains financing from an Ontario insurance company. If the financing rate is high, he raises the rents.

For the small builder, financing for the first project was almost always costly (100% equity). "Builders wanting to do business in the US must ride on equity, and stay lean and mean..." A Canadian's balance sheet is worthless in the eyes of the American banks. Once the first project is completed, as soon as you have an American balance sheet, the American banks are receptive to financing the second project. It is better to contact a bank close to your project with your American associate: the bank then knows the micro market and is capable of understanding and evaluating the project. It is useful to have a permanent on-site address and a work permit, which demonstrate that you are there to stay. One of them mentions, however, "The financing is conditional upon deposits for 50% of the advance sales."

For another builder, financing is routine. He invests 25% in equity, but there are, just like in Canada now, fees of 1% of the loan charged by the bank to close the loan. The banks accept his American balance sheet and his reputation. They know that he is there to stay and finish his projects. The financing cost is identical in the United States and Canada.

One of the entry barriers is the weak North-South banking relationship. There are no agreements between the Canadian and American banks. An account must be opened in each of the cities, and since the American banking system is fragmented, since the laws differ and since there is no transferability from a Canadian branch to an American branch, distance managing is very difficult and does not help exports. Banking relations are very trying in the United States and accounts cannot be settled electronically there, as in Canada.

Hence, each region has its business unit and its profit centre. For one of the interlocutors, the regional offices remain small. In fact, accounting is made easier this way, especially since, in taxation, the corporate tax differs from state to state. However, all of the support comes from the head office in Canada. With time, market multiplication expands this head office for various support functions. They work hard to reduce overhead by distributing it over several markets. Another interlocutor forms one company per condominium project and dissolves it as soon as the project is completed. In 98% of the cases, the condominium association sues the builder for defects. In Florida, there are lawyers specialized in this field.

### 4.9.4 Materials

Generally speaking, contractors manage to obtain the materials they need. The prices vary by region, especially for materials that are difficult and costly to transport. One of the interlocutors mentioned that with free trade, the materials markets are so integrated between the United States and Canada that a shortage in the United States is felt the same way here. Some of their Canadian suppliers actually already export to the United States. Other interlocutors refuted this statement by stating that materials are less expensive in Canada. "At the present time, there is a shortage of gypsum, bricks and structural steel in the United States. The Canadian and American markets are integrated for structural steel for example, but not for bricks that are too costly to export long distances." At the time of the Fort Worth tornado, one of them had to import gypsum from other states. Another affirms having no problems procuring materials. If there is a lack of gypsum in Florida, he gets his supply from another state by paying premium transport charges.

The majority of Canadian companies do not care about the Canadian origin of the materials. The materials come from Canada if necessary. Each case is different. For some, the lumber is always bought from Canada. In another case, if the materials explicitly required in the specifications cannot be found, they are exported from Canada. This situation arose twice.

In fact, on the one hand, the real estate investment developer has an interest in facilitating the construction intricacies as much as possible. He first commits to exporting his expertise. On the one hand, importing the materials is not part of his distinctive skill. On the other hand, if he exports his materials, this complicates his construction problematics. For his part, the materials vendor is not sure of the sales opportunities in the market and does not want to take a risk.

### 4.9.5 Labour

We mention that the supervisory labour goes through immigration without any problem. However, a work permit (*green card*), renewable every three years, must be obtained. This permit provides a fiscal, financial (more legitimate to enter an American bank) and management advantage (it is delicate to enter the United States so often). None mentioned problems with immigration.

Everyone does their building by resorting to sub-contracting. The manner of selecting sub-contractors (screening, open bidding, negotiation...) differs according to the location. Not one has a complete local organization with his labour. The American labour shortage has two impacts. On the one hand, the wages increase but "It's not because you accept to pay more that you will have more qualified workers. Some sub-contractors are excellent liars." In the commercial buildings, 80% of the structure is sub-contracted. On the other hand, this shortage requires the managers to work much harder. To date, the majority affirm having managed to meet the construction deadlines, but they unflinchingly accept to pay overtime to the sub-contractors.

One large company mentioned that the more it can use its own labour on a work site, the more efficient it can be. This even constitutes a distinctive skill. Since it is defined as a good employer, it has good employees. This interlocutor stressed at length the need to use good American managers on American projects: "Understand how important it is to build an organization based on good American people and work hard to recruit locally your senior management. It is not a good strategy to send Canadians."

Another interlocutor from a large company speaks of the quality of the Canadian managers. In the first years of his incursion into the American market he made no money. On the one hand, he did not put enough zeal into management. He lacked good managers in the United States. This is the biggest, most often made mistake. "Make sure to send your best managers at the beginning of your American activities." And, he accepted too many mandates too quickly. Now his best managers are in the United States and the profit margin is the same as here. "Find good local managers. It is the hardest thing to do." He gives them a lot of latitude and autonomy. He is in close contact with them thanks to the Internet. He goes the United States in person only once a month. American managers are more hard-nosed in business than Canadian managers, but he believes that the Canadian managers are probably better because of Canada's winter conditions.

Among some small residential builders, the structural work is sub-contracted and the builder's permanent employees are responsible for the interior work and finishing. One of them in Florida, who contracts out the finishing work, mentions: "Out of ten contract workers contacted, seven are Quebeckers: jointers, ceramic tile installers, etc." On the other hand, for one of the small contractors in Carolina, labour is hard to find; there are a lot of Mexicans who work very slowly. Construction time frames are enormous: 20 weeks down there as opposed to ten here.

Another says he has two strategies. Labour is less expensive than here. It may be hard to find but there is really no problem. Three-quarters of them are not unionized. If he is doing a big project (two 25-floor high-rises), he will choose unionized employees: the sub-contractors are larger and are consequently capable of carrying a heavier workload. He is in the process of building a 16-floor high-rise in Fort Lauderdale and will equip himself with non-unionized sub-contractors. They are just as competent. The unskilled worker costs $12 an hour. One quarter of this labour force is from Quebec.

Another who is, moreover, quite successful says he hires Quebec architects for two reasons. First, for proper control of the concept's profitability and viability. A local architect produces the rough plan. Down there they are very specialized and he chooses his architect based on his project (Spanish or other style). The exterior and interior concept is entirely reviewed here. He has his interior plans made here because here we pay attention to detail: interior arrangement of the kitchen for example. Then the plans return to the local architect for the seal. His distinctive skill is a concept always well done. He knows his trade, controls his risks properly, knows how to plan his concept so that all of his units are attractive and preserve a good balance between design and price. Second, the American architects are all working on larger projects and are too busy to spend time on his smaller projects.

The large contractors have no problem procuring skilled local sub-contractors. The quality of the choice of sub-contractors is important. One of the interlocutors looks for this quality especially in electromechanics: "The workers must be very qualified to equip a building with the latest novelty in high technology infrastructure." Once again, energy efficiency considerations are not important to or valued by the clients.

Another mentions having no problem finding good sub-contractors. Since the market is tight, sub-contractors demand an amount in a payment security deposit to protect themselves. Still another says that his American associate knows the sub-contractors. He was not able to find an American masonry crew at a reasonable price. He therefore exported a crew of 15 Canadian masons down there. He showed that the Americans did not have the type of masonry expertise required by the project and he obtained all the necessary visas in three months. "There is no problem exporting sub-contracting: all you need is the imagination to do it." Another also mentions that if the labour is specialized, by showing an American shortage, there is no problem bringing it in.

Another interlocutor told the same story. As a general contractor, he knows a nucleus of sub-contractors through his network of lawyers, engineers and architects down there. It is through this network that he expands his market coverage. He therefore has a list of sub-contractors with their prices, qualifications, guarantees, references and banks. He also uses some Canadian sub-contractors. He classifies them and defines them as specialized crews and has no problem passing them through immigration, especially for his projects in Orlando where there is a large labour availability problem. Yet another states that, on occasion, he may send a Canadian crew if the need arises.

### 4.9.6 Distance Management

All the small exporters mention that distance management is greatly simplified due to the Internet and electronic mail. One of them receives photographs of the project every two days. Another mentions that the Internet is useful for increasing contact with his client. The tool must not be so cumbersome that the client cannot handle it. He places the drawings of his project on his Web site and, with a password, the client has access to them to discuss the project's progress during telephone conferences which he schedules. He has thereby already proven to one client that he was more available than an American competitor located in the same city and on the same street as the client.

One of them says that you must visit the site every quarter to meet with the brokers, see the projects, perform the closings, meet with the partner, check the books and the budget, etc. However, controlling the costs and work schedule is somewhat facilitated by the Internet. Another mentions: "The president goes down there about 3 to 4 days a month." A larger one who is succeeding says that his best Canadian managers are on the American work site and live in the United States. They are there to stay. Of course, there is a boom in Montreal right now but in three or four years it will be over. Another even larger mentions having local offices in all of his building areas, but his American head office is in Denver. The different companies are managed from there, each with its financial statements, local licences, and, they have thorough knowledge of the local agencies, banks, codes, taxes and even the local mentalities. Admittedly, distance management is facilitated by the Internet and even by the intranet. However, communication costs have not necessarily decreased and this means of communication is more limited in the very numerous small projects for which overhead is high.

### 4.10 Building Codes

The codes vary from city to city: setback, height, etc. In the past, work-site managers had no problems passing the code inspection. And it is relatively easy. Several small builders mentioned using a local American architect for the general concept, which guarantees the product's compliance with the codes, and an architect from here for the interior details because they pay more attention to detail.

Generally speaking, the American practices differ from ours primarily with respect to the important role the County Fire Marshall and also the *American Disability Act* play. One company formed a strategic alliance with a Texas architect firm that is certified in all of the states (*Permit Expediters*): for a minimal price, this firm reviews and certifies his drawings and specifications and ensures their compliance with the standards in each of the cities.

### 4.11 American Nationalism

The vision here is polarized.

For one group of interlocutors, one of the main entry barriers is American chauvinism. The company's Canadian ownership is definitely an issue. The Canadian manager does not belong to the network, did not attend a long-established American university or college and he does not belong to the fraternity. Even though we may think the business climate is competitive and merciless, the impact of American patriotism must not be underestimated: the English Canadian does not speak the same language and does not spell his words the same way. It is therefore necessary to have all the appearances of an American company, in spite of our international roots. It is necessary to adapt and grow into an American. To do so, the management of the American business absolutely must be entrusted to an American. Of course, the company's Canadian president must visit the work sites often, talk to and motivate his employees. But the client has to know that full authority is entrusted to an American manager.

Another, more level-headed person mentions: "The Americans are more chauvinistic than we think. They resist and we have to prove our added value to them. There are therefore a lot of soliciting fees. Once you have gained their trust, you become a preferred supplier and your first project can generate others. Communication, the speed of response time and service defined by meeting the schedules and the budget are essential ingredients for success. The relationship must be kept up."

For the other group of interlocutors, there is no nationalistic type of barrier. The great number of ethnic groups in the United States even makes communication easier in spite of a strong French accent: "The Americans are first and foremost deal makers. Money talks." One mentions that we are nationalistic here in Montreal and wanting to protect your local industry is a normal reaction. Another states that the American is no more chauvinistic than the British Columbian Canadian. "In business, British Columbia is a more distinct society than Quebec."

### 4.12 Canadian Support

One large company involved in construction in the United States for the past 25 years mentions that NAFTA neither changed nor facilitated anything.

Some mention that the assistance offered is too broad. The trade delegates should get a bit more involved when they are needed. Assistance should be prompt with less paperwork.

The governments must be prudent and not stimulate exports by revealing tricks. This is not enough to succeed. The companies that are contemplating it must first learn to share. The American market is so vast that exporters have everything to gain from sharing. Sharing information, sharing relations and sharing resources are all ingredients essential to success. And you have to survey the land. One very informed exporter reiterates: "Giving tools on how to do business in the US is a dangerous means of stimulating exports. Lenders must also be reluctant in lending entrance money. Instead, CMHC must encourage builders in getting working visas and invite them to share their experiences in conferences."

## 4.13 Conclusion

The semi-structured interviews allowed for weighing the entry barriers at the time of reviewing the literature. Growth in the American market is difficult but attainable.

In general, all of the builders-exporters we interviewed want to intensify their activities in the United States. The narrowness of the local market and the resulting need to find opportunities encourage them to take more interest in a better planned growth that would come from the United States. Most would prefer to grow there through limited-scale projects based on a niche.

Among the large ones, the incursion into this market was integrated into the company's strategic plan and they want to grow there. Some candidly admit that they made no money in the first years. However, the largest companies staffed themselves with solid management teams, highly skilled in the administration of work sites and cash flow. One of them mentions that, to facilitate networking, the American senior management must be composed of American managers. Mergers and consolidations can also be seen among them, since they are trying to increase their market share and rationalize their operations.

The Canadian contract building industry is highly fragmented and is primarily composed of a large number of highly specialized small firms. For many of these small firms that have experienced exporting to the United States, the soliciting activities need to be repeated: very often their entry was the result of random circumstances and their commitment was sporadic. They became involved there for different reasons but above all because of the weakness of the domestic markets in the early 90s. But, if they did not nourish their relationships through these small projects, if they did not set up a permanent office, today they cannot really rely on that experience for their current growth. Yet all mentioned the long time frames that were to be expected and the high initial costs that international projects entail.

Nevertheless, the more distinctive the offer of services, the less keen the competition and the larger the profit margin. For the general contractor, it is difficult to be distinctive. More zeal and resources must be invested to be outstanding in management quality. And, it is necessary to travel often to the region. At the present time, there is actually so much work in the United States that good construction project managers and superintendents are difficult to find. Among the contractors who succeed, the best managers are on the American work site and live in the United States. For one of them, these managers must even be Americans.

Distinctive skill is better defined among the designer-builders. Some mention for example, that our architects have the time to be attentive to detail with a view to a concept always well done. However, even if the technical performance and the price offered by Canadians are competitive, the local construction companies have an obvious competitive advantage given that they are thoroughly knowledgeable of the local conditions and networks. Furthermore, pressure is often exerted for the project to be structured and designed to maximize local participation. We must therefore prove our added value to them and the profit they will make with our participation. The relationship with the client requires a local presence in both the residential and non-residential domains. There are therefore many solicitation fees to assume in order to win their trust and become a preferred supplier.

The majority of the exporters form alliances with American companies. The partnership offers direct access to building codes, clients and sub-contractors, but there is always the drawback of cultural differences to settle. Generally speaking, however, the Americans seem loyal and their word can be trusted.

Real estate liquidity is much greater down there than here and there is no real problem in access to financing. For the small builder, however, financing the first project was almost always costly. Some mentioned the need to have a great deal of equity.

Distance financial management does, however, constitute a constraint. The North-South banking relationship is poor. There are no agreements between the Canadian and American banks. Moreover, an account must be opened in each of the cities because the American banking system is fragmented and the laws differ.

The problem of access to labour was less acute than we would have believed. Some exporters even use Canadian sub-contractors by classifying them and defining them as specialized crews. However, the American labour turnover rate within the company is very high.

In all, the firms that have a permanent office have acquired fairly in-depth knowledge of their specific market because they have built relationships there. In spite of everything, the main obstacles to performing international work are a limited knowledge of the opportunities, limited access to the local network and the absence of quality resources within the company to maintain this network and undertake other projects. The review of the accounts of the experiences illustrate that four qualities are essential for successfully penetrating the American market: opportunism, sharing, strategy and perseverance.

## V SUMMARY AND CONCLUSIONS

In the first part of the study it emerges that, because of both its growth and its size, the American market at our door represents an extraordinary potential for exporting construction services.

Growth in the range of 3.9%, which has persisted since 1996, is no longer sustainable without hikes in wages, interest rates and prices. In 2001, a rate of 2.5% is expected. Moreover, May 2000 ushered in the sixth interest rate hike by the Federal Reserve since June 1999 for a total of 1.75% in one year. Mortgage rates in May were situated at 5.5% above the inflation rate. Two threats are emerging on the horizon. On the one hand, the savings rate is reaching its lowest level, i.e. 1.9%, and on the other, the trade deficit in 1999 reached a record level that is threatening the value of the American dollar. In the long term, however, it is expected that the number of households will increase by 1.2 million per year for the next ten years. Furthermore, a productivity boom is anticipated in the tertiary sector as the number of "connected" Americans rises. In truth, microprocessors have only been fast and relatively inexpensive since 1993. Consequently, a boom is expected in the areas that have made the technological conversion.

In terms of size, the population will reach 300 million in 2010. Table 2 indicates the comparative construction in each of these two markets for 1999. In the United States, we find six to twenty times more market than here. In the strongly growing tertiary sector, the multiplier reaches 15 and as a result, the hotel sector is also very active.

*Table 2- Building Construction in the United States and Canada in 1999*

| | United States | Canada | Multiplier |
|---|---|---|---|
| ***Residential*** | | | |
| Multiple | 342,000 units[2] | 57,778 units[4] | 5.9 |
| ***Non-residential*** | | | |
| Offices | 139.9 Million sq. ft.[1] | 8.8 Million sq. ft.[5] | 15.9 |
| Stores | 279.0 Million sq. ft.[6] | na | |
| Industries | 162.9 Million sq. ft.[1] | 24.0 Million sq. ft.[5] | 6.8 |
| Hotels | 148,200 rooms[3] | 6,455 rooms[3] | 22.9 |

Sources: 1-SIOR, 2-Bureau of the Census, 3-Smith Travel Research, 4-CMHC, 5-Royal Lepage, 6-McGraw Hill

Of course, the economic cycles follow each other in the North American markets. An investment in the United States must therefore not be viewed as a diversification of operations, but rather as an expansion of operations. However, the real estate markets are affected not only by the economy's health but also by the migratory movements and the level of synchronization between supply and demand. With respect to this, we note that by 2010, it is expected that more than one quarter of the American nation will live in Florida, Texas and California. Similarly, in certain areas such as New York, the supply is never enough to fill the needs of the demand.

The builder-exporters we interviewed want to intensify their activities in the United States. The narrowness of the local market pushes them to take more interest in better planned growth. For the majority of them, the physical accessibility and the size of the area were important criteria for choosing where to set up. In the course of our interviews, several mentioned the quantity of direct flights from their point of origin. High-rise construction also requires a certain market depth. Demand volatility is greater in the small regions and also in areas very specialized or dependent upon a single activity sector, such as tourism regions. On the other hand, supply volatility is greater in very large regions where land and labour constraints are abundant.

The first part of the study reveals that the multiple housing sector is promising, especially in the American

East where it is better accepted than in the West. Moreover, as paradoxical as it may seem, the strongest demand for rental housing will come from households aged 45-64: they are expected to grow 6.6% annually for the next ten years, while this is forecast at 2.3% for the tenant households aged 65 and over. To meet their demand, apartments with finishing, design, amenities, security, services and space are necessary. The recent rise in interest rates favours rental housing, especially in the areas where the cost of ownership, calculated by including municipal taxes and mortgage interest deductions for income tax purposes, is affordable compared to the median income.

In the American East, Florida's population is growing continuously at a rate of 1.5% per year and this immigration contributes to increasing the labour pool. Washington and the New York suburbs are also experiencing good immigration of households without children. New York and Miami accept density better than Boston, Charlotte and Columbus. However, the study of the comparative costs of housing ownership and renting suggests that it would be profitable to build rental housing in Chicago, New Jersey Centre and Boston. Charlotte is an environment with families with children. We note here that, generally speaking, the East Coast seems more hospitable for women than the West Coast. This observation is important in the context of a qualified labour shortage and the growth in women's participation in the labour market.

In the American West, Seattle has a high proportion of bachelors and the construction of multiple housing there is very significant. Austin is also experiencing phenomenal immigration of households without children. Portland receives primarily young families. San Jose and Austin accept density better than Portland and Denver. Furthermore, the study of the comparative costs of housing ownership and renting suggests that it would be profitable to build rental housing in San Jose, Austin and Seattle.

In the office building sector, the major trends indicate the relentless continuation of growth in the services sector, the need for space and for company moves to get closer to qualified labour pools. Quality of life and a favourable business environment are becoming increasingly important factors for attracting skilled labour and productive companies. Non-residential development is therefore closely tied to residential development. An over-supply of new office space was observed in certain markets. However, the current growth in rents is still being supported and well above the inflation rate. We note here that the risk in this sector is associated with an over-production that is not synchronized with demand. The main reasons for this discrepancy are the long time lag between supply and demand, the long period of rent adjustment and the uncertainty as to the extent of the demand.

Demand is influenced greatly by the cities' economic base and personality. Hence, New York and Washington are international calibre cities. New York's vitality is the result of international immigration. Miami is also very dependent upon Latin America's economic health. None has enough of a level of development underway to truly satisfy the needs. Elsewhere, the current demand is generated by industry niches emerging from outsourcing and Internet services.

Three large cities in the American East have made the technological conversion. The phenomenal expansion of the biotechnology industry and the high technology euphoria are having a direct impact on Boston and its real estate sector, as much in the downtown area as in the suburbs. Northern Virginia in Washington is also experiencing a spectacular boom because of the ease of doing business there. Similarly, the centre of New Jersey in New York is receiving the sub-contractors specialized in business services. This area is also reputed for its pharmaceutical sector. However, the market is limited by strong zoning regulations.

Charlotte belongs to the group of new emerging cities. These cities are typically small and capable of capitalizing on new technologies. We also group Colombus under this heading. If the emerging city wishes to grow, access to qualified labour must never become a limitation. This is why the Florida economy, more diversified than those of Georgia and the two Carolinas, presents less risk. Orlando, for example, has the highest job growth rate in America. Since 1997, the number of high technology companies there has risen 44%.

The hotel sector is at the peak of its cycle. Because of population aging, it is expected that the leisure clientele for urban and cultural trips will grow more than the business clientele, composed, incidentally, of more and more women. We will again mention that Florida monopolizes a lot of this market. The industry and retail sectors are under-performing.

As a conclusion to this first part, the areas we selected for their potential are not necessarily the best export areas for a company. In reality, a company must lay out an investment strategy aligned with its personality and its culture. What kind of risk is it prepared to accept? What returns is it expecting? The contractor must use discretion before choosing the penetration area. For example, New York is a very profitable city: increasing rents and low vacancy rates prevail there. But the exporters pass it by because land is scarce, regulations are difficult and the unions are very powerful.

The contractor must also feel comfortable with the penetration area. Several exporters mentioned that Miami is a very strong but very undisciplined market. It is the gateway to South America, but there are traffickers, resellers and unethical dealers. And also many non-unionized workers, inexpensive but slower than here. We mention that the transportation, sewage, airport infrastructures are aging and inadequate in many cities.

In the second part of the study, we reveal the methods used by the current exporters to bypass the barriers to entry and to growth in these markets. In fact, construction services exports to the United States do not occupy the space they are due. On the one hand, the trade in services represents only 12% of total trade, below the 19% global average. On the other hand, the Canadian contractors' revenues coming from international construction projects are estimated to be lower than 1%. And out of this, less than 50% of the exports are destined for the United States. Yet the influence of the distances on trade profits is significant. Furthermore, information technologies should improve the delivery of services at a distance.

Why then this under-representation of Canadian construction services exports to the United States? Only one element of the answer is a result of the fact that the operations of American corporations affiliated with Canadian companies are only partly captured in the balance of payments. We therefore reviewed the literature on the barriers to entry and to the growth in construction services exports to the United States. However, the semi-structured interviews allowed the problem to be better identified. In truth, the explicit barriers of a regulatory nature or shortages in materials, labour and financing are not those which deflect entry or eat away at profits. Instead, it is the implied barriers that limit exports.

The real estate financing markets in the United States have abundant capital, are more liquid than here and are highly competitive. Obtaining credit is not a major obstacle, as long as the lenders are approached with a credible and well-expressed file. We proposed a standard presentation recognized by all the financing players that demonstrates the developer's control of his product and properly summarizes all the information in a credible fashion. However, among the small builders, the financing of the first project was almost always costly in equity. Once the first project is completed and as soon as there is an American balance sheet, American banks are receptive to financing the second project. It is better to contact a bank close to the project because then it knows the micro market and is capable of understanding and evaluating the project. A permanent address and a work permit are necessary to show that one is there to stay.

In terms of labour, a national shortage of 250,000 construction workers is expected by the end of 2000. And this shortage is expected to last from five to ten years. The labour access problem was less acute than we would have believed.

Distance financial management constitutes a constraint. The North-South banking relationship is poor. There are no agreements between Canadian and American banks. Furthermore, an account must be opened in each of the cities because the American banking system is fragmented and the laws differ by state. Electronic account payment is therefore much less advanced than here.

Shortages are noted in cement and structural steel. New plants are being built to manufacture gypsum and bricks, also in short supply. But the exporters indicate that in spite of everything they do not have much of a procurement problem. The resulting increase in costs is recovered in the prices.

The building codes vary from city to city. However, these codes do not pose a problem. It is easy to find them, understand them and comply with them. Moreover, there is a strong movement towards standardizing the codes, which makes them stricter, but no more so than in Canada.

The formal barriers are therefore surmountable without great difficulty. What are more insidious are instead the informal and implied barriers. We group them under three considerations: the need to establish partnerships, the endurance of the commitment, the importance of the quality of the resources allotted to conquering the market.

The best way to penetrate the American market is to form an association with local partners. On the one hand, the use of financial agents or intermediaries facilitates obtaining credit. The intermediaries are financing brokers with an extensive network of contacts in the institutional community. The financial agents act on behalf of a group of lenders and serve the interests of the applicant and the creditor at the same time. Canadian companies often do not obtain the advice of these skilled people. The commissions required, varying between 1% and 2% according to the type of file, are amply recovered by the borrower in terms of efficiency and productivity. By forming bonds in this way with these suppliers, the contractor also increases his chances of finding good sub-contractors.

On the other hand, the work model adopted on the domestic market cannot be transposed directly to the American market. The business conditions, practices and cultures vary locally. For example, care must be taken to translate all of the documents using words and dimensions that can be understood locally. It is difficult to succeed in setting up in an area without alliances. The local construction companies always have an obvious competitive advantage in the fact that they are thoroughly familiar with the interpretation of the codes, the local networks for the financial institutions and sub-contractors, the attitudes of the clients and the business opportunities. Alliances must therefore be formed by proving our added value and the profit that the American partner will derive from our participation. At the time of the partnership, there are always cultural differences to be settled. Generally speaking, Americans can be taken at their word even if they are more mobile than Canadians. New exporters should concentrate their efforts in only one geographic region.

A second very important barrier we saw basically has to do with the endurance of the exporter's commitment to conquering this market. Some exporters did not nourish their relationships, did not invest in a permanent office and, today, they cannot really count on that experience for their growth. Yet, all mentioned the long delays and the high initial costs entailed in international projects. To be sustainable, the incursion into the American market must first be integrated into the company's strategic plan.

Client relations also require a local presence in both the residential and non-residential domains. And it is necessary to travel into the area often. To become a preferred supplier, it is necessary to take the time to win their trust. The companies that have a permanent office know their market much better. For them, it is not because Canada is in a real estate boom that they will reduce their involvement in the American market, otherwise everything would have to be repeated as soon as the Canadian market weakens. We mention here that the business climate is typically very litigious. Lawsuits are common practice and are costly especially with difficult clients, such as condominium associations or municipal authorities, and with sub-contractors.

Similarly, the states of California and New York would be more litigious environments than elsewhere.

The third barrier observed stems from the fact that the great majority of exporters did not allocate sufficient resources to conquering the market. The more distinct the offer of services, the less keen the competition and the larger the profit margin. However, it is difficult for the general contractors to stand out. And it is more difficult to stand out in the non-residential sector, because it is possible to differentiate the residential product while still staying very close to the standard local product. More zeal and resources must therefore be invested to stand out in terms of quality of management, of organization of the work site schedules. As it stands, the Canadian contractual construction industry is composed primarily of a large number of small firms. Shortfalls in their human resources have led many of them to give up on exporting. Among the contractors who succeed, the best managers are on the American work sites and live in the United States.

Americans are typically practical. They want to know what advantages they can obtain from a deal in dollars and cents. However, once again, even if we might think the business climate is mercilessly competitive, American chauvinism must not be underestimated. All the appearances of an American company must be provided. Some exporters candidly admitted that in the first years, they did not make any money. However, one of them says he managed to improve his profit margins after staffing his company with sound and skilled American managers. Americans prefer to do business with contractors with whom they have already established mutual trust during frequent meetings. The Canadian manager has not attended a long-established American university or college and he does not belong to the fraternity.

In conclusion, the American market has everything necessary for growth. The exporter will have to examine the area according to his personality, culture and personal comfort. An attitude highly adapted to the local market is required. He will have to conduct on-site research of the market contemplated before coming to the conclusion to penetrate it. He will have to assess the desirability of the site, review the new demand trends, and speak with brokers, tenants and building managers. Then he will be able to refine the design of his project by making comparisons with the projects in the supply pipeline and by reviewing the lessons and experiences of comparable new projects. During the financial analysis and the search for capital, he will have to examine the sensitivity of the project's profits to the different local factors he perceives.

The review of the barriers to entry and to growth in the American market has shown that penetrating the American market is admittedly very difficult. There is a lot of competition and American builders are well organized and stand by each other. To make a place for oneself, a great deal more energy must be expended than might be imagined. But the difficulties are surmountable if the incursion is well planned and for the long term. Reviewing the accounts of the experiences reveals that four qualities are essential to successfully penetrate the American market: opportunism, sharing, strategy and perseverance.

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# APPENDICES

APPENDICES

Table A1- Population by Metropolitan Area ....140
Table A2- Units Allowed by Metropolitan Area, 1997 to 1999 ....142
Table A3- Rental Housing Vacancy Rate by Metropolitan Area ....145
Table A4- Non-agricultural Jobs by Metropolitan Area - (in 000) ....147
Table A5- Analysis of Metropolitan Areas of the Large Metropolitan Municipalities ....149
Table A6- Population and Job Estimates by Certain Metropolitan Areas ....151
Table B1- Office Market Data in 1997 ....152
Table B2- Office Market Data in 1998 ....154
Table B3- Office Market Data in 1999 ....156
Table C1- Industrial Buildings Market Overview by Metropolitan Area, 1999 ....158
Table D1- Retail Commerce Data by Metropolitan Area - 1997 ....160
Table E1- Characteristics of the Hotel Market ....161
GUIDE D'ENTREVUE COMPLET ....163
COMPLETE INTERVIEW GUIDE ....165

## Table A1- Population by Metropolitan Area

| | 10/1/99 | 7/1/98 | 7/1/97 | 7/1/96 | 7/1/95 | 99-98 | 98-97 |
|---|---|---|---|---|---|---|---|
| Atlanta, GA MSA | 3,892.5 | 3,746.1 | 3,634.2 | 3,532.7 | 3,430.2 | 3.91% | 3.08% |
| Austin-San Marcos, TX MSA | 1,152.9 | 1,105.9 | 1,069.8 | 1,038.7 | 1,002.1 | 4.25% | 3.38% |
| Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA | 5,664.3 | 5,633.1 | 5,593.4 | 5,554.4 | 5,521.4 | 0.55% | 0.71% |
| Buffalo-Niagara Falls, NY MSA | 1,224.6 | 1,152.5 | 1,163.1 | 1,173.2 | 1,180.5 | 6.25% | -0.91% |
| Charlotte-Gastonia-Rock Hill, NC-SC MSA | 1,423.4 | 1,383.1 | 1,351.7 | 1,318.9 | 1,287.2 | 2.92% | 2.32% |
| Chicago-Gary-Kenosha, IL-IN-WI CMSA | 8,885.2 | 8,809.8 | 8,750.9 | 8,694.0 | 8,628.7 | 0.86% | 0.67% |
| Cincinnati-Hamilton, OH-KY-IN CMSA | 1,966.7 | 1,948.3 | 1,934.1 | 1,918.7 | 1,906.3 | 0.95% | 0.73% |
| Cleveland-Akron, OH CMSA | 2,908.0 | 2,911.7 | 2,914.8 | 2,915.7 | 2,911.5 | -0.13% | -0.11% |
| Columbus, OH MSA | 1,486.5 | 1,469.6 | 1,456.4 | 1,442.2 | 1,430.2 | 1.15% | 0.90% |
| Dallas-Fort Worth, TX CMSA | 4,964.1 | 4,802.5 | 4,677.8 | 4,556.2 | 4,447.3 | 3.37% | 2.67% |
| Dall-Dallas TX PMSA | 3,300.4 | 3,209.9 | 3,123.0 | 3,036.7 | 2,960.1 | 2.82% | 2.78% |
| Dall-Fort Worth-Arlington TX PMSA | 1,631.4 | 1,592.6 | 1,554.8 | 1,519.4 | 1,487.2 | 2.43% | 2.43% |
| Denver-Boulder-Greeley, CO CMSA | 2,426.1 | 2,365.3 | 2,319.0 | 2,270.6 | 2,226.9 | 2.57% | 2.00% |
| Detroit-Ann Arbor-Flint, MI CMSA | 4,480.8 | 5,457.6 | 5,442.7 | 5,424.8 | 5,379.7 | -17.90% | 0.27% |
| Grand Rapids-Muskegon-Holland, MI MSA | 1,050.8 | 1,037.9 | 1,027.8 | 1,015.7 | 1,002.2 | 1.24% | 0.99% |
| Greensboro-Winston-Salem-High Point, NC MSA | 1,185.6 | 1,167.6 | 1,153.4 | 1,139.1 | 1,123.1 | 1.54% | 1.23% |
| Greenville-Spartanburg-Anderson, SC MSA | 933.2 | 918.4 | 906.7 | 895.1 | 882.2 | 1.62% | 1.29% |
| Houston-Galveston-Brazoria, TX CMSA | 4,527.5 | 4,407.6 | 4,314.4 | 4,229.7 | 4,153.2 | 2.72% | 2.16% |
| Indianapolis, IN MSA | 1,538.4 | 1,519.2 | 1,504.5 | 1,489.2 | 1,473.6 | 1.26% | 0.98% |
| Jacksonville, FL MSA | 1,065.0 | 1,044.7 | 1,028.8 | 1,008.8 | 979.9 | 1.94% | 1.54% |
| Kansas City, MO-KS MSA | 1,762.9 | 1,737.0 | 1,716.8 | 1,694.8 | 1,685.6 | 1.49% | 1.18% |
| Las Vegas, NV-AZ MSA | 1,399.1 | 1,321.5 | 1,262.4 | 1,197.2 | 1,138.2 | 5.87% | 4.68% |
| Los Angeles-Riverside-Orange County, CA CMSA | 16,076.8 | 15,781.3 | 15,549.6 | 15,369.7 | 15,259.3 | 1.87% | 1.49% |
| LosA-Los Angeles-Long Beach CA PMSA | 9,336.1 | 9,213.5 | 9,116.5 | 9,056.1 | 9,029.5 | 1.33% | 1.06% |
| LosA-Orange County, CA PMSA | 2,796.0 | 2,721.7 | 2,663.6 | 2,606.6 | 2,572.2 | 2.73% | 2.18% |
| LosA-Riverside-San Bernardino, CA PMSA | 3,199.0 | 3,114.1 | 3,047.7 | 2,995.9 | 2,953.6 | 2.73% | 2.18% |
| Memphis, TN-AR-MS MSA | 1,005.3 | 1,093.4 | 1,082.5 | 1,074.6 | 1,064.2 | -8.06% | 1.01% |
| Miami-Fort Lauderdale, FL CMSA | 3,724.4 | 3,655.8 | 3,601.9 | 3,546.0 | 3,477.7 | 1.88% | 1.50% |
| Miami-Fort Lauderdale, FL PMSA | 1,534.5 | 1,503.4 | 1,472.9 | 1,440.4 | 1,413.2 | 2.07% | 2.07% |
| Miami-Miami, FL PMSA | 2,176.1 | 2,152.4 | 2,129.0 | 2,105.6 | 2,064.5 | 1.10% | 1.10% |
| Milwaukee-Racine, WI CMSA | 1,647.0 | 1,645.9 | 1,645.2 | 1,646.1 | 1,644.2 | 0.07% | 0.05% |
| Minneapolis-St Paul, MN-WI MSA | 2,877.6 | 2,831.2 | 2,794.9 | 2,761.1 | 2,725.6 | 1.64% | 1.30% |
| Nashville TN MSA | 1,181.8 | 1,156.2 | 1,136.6 | 1,115.0 | 1,092.2 | 2.21% | 1.73% |
| New Orleans LA MSA | 1,311.3 | 1,309.4 | 1,308.1 | 1,308.5 | 1,310.6 | 0.14% | 0.10% |
| New York-North New Jersey-Long Island, | 20,309.8 | 20,124.4 | 20,005.7 | 19,915.8 | 19,843.5 | 0.92% | 0.59% |
| NY-Bergen-Passaic, NJ PMSA | 1,349.8 | 1,335.7 | 1,328.0 | 1,321.3 | 1,315.5 | 1.06% | 0.58% |
| NY-Middlesex-Somerset-Hunterdon, NJ PMSA | 1,131.9 | 1,105.8 | 1,090.5 | 1,077.2 | 1,066.1 | 2.36% | 1.41% |
| NY-Monmouth-Ocean, NJ PMSA | 1,093.3 | 1,079.4 | 1,065.2 | 1,050.7 | 1,034.8 | 1.28% | 1.34% |
| NY-Nassau-Suffolk, NY PMSA | 2,680.4 | 2,660.6 | 2,654.1 | 2,647.9 | 2,641.5 | 0.74% | 0.25% |
| NY-New York, NY PMSA | 8,718.0 | 8,650.4 | 8,621.1 | 8,602.3 | 8,588.4 | 0.78% | 0.34% |
| NY-Newark, NJ PMSA | 1,956.5 | 1,943.5 | 1,938.3 | 1,934.1 | 1,930.9 | 0.67% | 0.26% |
| Norfolk-Virginia Beach-Newport News, VA-NC MSA | 1,594.2 | 1,542.1 | 1,544.8 | 1,536.0 | 1,532.2 | 3.38% | -0.17% |
| Oklahoma City, OK MSA | 1,048.9 | 1,039.0 | 1,031.2 | 1,021.7 | 1,012.7 | 0.95% | 0.76% |
| Omaha, NE-IA MSA | 702.0 | 693.9 | 687.5 | 680.0 | 669.7 | 1.17% | 0.93% |
| Orlando, FL MSA | 1,558.1 | 1,504.6 | 1,463.0 | 1,421.3 | 1,388.6 | 3.56% | 2.84% |
| Philadelphia PMSA | 4,955.5 | 4,946.6 | 4,939.8 | 4,948.3 | 4,952.7 | 0.18% | 0.14% |
| Phoenix-Mesa, AZ MSA | 3,045.7 | 2,931.0 | 2,842.0 | 2,753.4 | 2,661.4 | 3.91% | 3.13% |
| Pittsburgh, PA MSA | 2,329.3 | 2,346.2 | 2,359.8 | 2,374.3 | 2,386.2 | -0.72% | -0.58% |
| Portland-Salem, OR-WA CMSA | 2,193.2 | 2,149.1 | 2,114.5 | 2,072.9 | 2,025.1 | 2.05% | 1.63% |
| Raleigh-Durham-Chapel Hill, NC MSA | 1,118.0 | 1 079.9 | 1,050.4 | 1,021.8 | 992.9 | 3.53% | 2.81% |
| Richmond-Petersburg, VA MSA | 964.7 | 957.0 | 946.6 | 936.1 | 92.7 | 0.80% | 1.10% |
| Sacramento-Yolo, CA CMSA | 1,724.3 | 1,685.8 | 1,655.7 | 1,630.5 | 1,605.3 | 2.28% | 1.82% |

## Table A1- Population by Metropolitan Area

| | 10/1/99 | 7/1/98 | 7/1/97 | 7/1/96 | 7/1/95 | 99-98 | 98-97 |
|---|---|---|---|---|---|---|---|
| St Louis, MO-IL MSA | 2,570.4 | 2,563.8 | 2,559.1 | 2,549.8 | 2,542.4 | 0.26% | 0.19% |
| Salt Lake City-Ogden, UT MSA | 1,289.2 | 1,267.7 | 1,250.9 | 1,228.8 | 1,212.8 | 1.69% | 1.35% |
| San Antonio, TX MSA | 1,579.0 | 1,538.3 | 1,506.6 | 1,481.7 | 1,455.4 | 2.64% | 2.11% |
| San Diego, CA MSA | 2,853.2 | 2,780.6 | 2,723.7 | 2,673.6 | 2,641.0 | 2.61% | 2.09% |
| San Francisco-Oakland-San Jose, CA CMSA | 6,941.1 | 6,816.0 | 6,717.6 | 6,622.4 | 6,552.0 | 1.83% | 1.47% |
| SanFran-Oakland, CA PMSA | 2,322.5 | 2,318.5 | 2,273.9 | 2,237.2 | 2,213.6 | 0.17% | 1.96% |
| SanFran-San Francisco, CA PMSA | 1,717.6 | 1,683.3 | 1,669.7 | 1,653.0 | 1,642.3 | 2.04% | 0.82% |
| SanFran-San Jose, CA PMSA | 1,671.1 | 1,641.2 | 1,620.5 | 1,594.3 | 1,567.1 | 1.82% | 1.28% |
| Seattle-Tacoma-Bremerton, WA CMSA | 3,580.4 | 3,424.4 | 3,378.5 | 3,313.8 | 3,263.9 | 4.56% | 1.36% |
| Tampa-St. Petersburg-Clearwater, FL MSA | 2,296.7 | 2,256.6 | 2,225.0 | 2,195.2 | 2,174.6 | 1.78% | 1.42% |
| Washington-Baltimore, DC-MD-VA-WV CMSA | 7,251.8 | 7,285.2 | 7,213.3 | 7,145.9 | 7,084.7 | -0.46% | 1.00% |
| Wash-Baltimore, MD PMSA | 2,494.7 | 2,484.0 | 2,476.0 | 2,469.0 | 2,462.5 | 0.43% | 0.32% |
| Wash-Washington, DC-MD-VA-WV PMSA | 4,757.1 | 4,673.9 | 4,609.4 | 4,549.8 | 4,495.3 | 1.78% | 1.40% |

Source: US Bureau of Census for 1995-1998 and Meyers/SIOR for 1999

## Table A2- Units Allowed by Metropolitan Area, 1997 to 1999

| | % 1990 5 and + | 99 Total Inventory | 99 INVENT. 5 AND + | 1997 | | | 1998 | | | 1999 | | | 97-98-99 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Proportion multi/total | Units per building | Units allowed |
| Atlanta (MSA) | 24.60% | 1,518,500 | 373,551 | 49,774 | 10,967 | 469 | 57,803 | 11,574 | 548 | 60,477 | 11,771 | 461 | 20% | 23.2 | 11,437 |
| Austin-San Marcos (MSA) | 27.36% | 433,000 | 118,457 | 13,617 | 4,720 | 271 | 16,423 | 5,128 | 289 | 16,677 | 7,885 | 421 | 38% | 18.1 | 5,911 |
| Boston-Worc.-Lawr.-Lowell-Brockt. (NECMA) | 22.80% | 2,219,100 | 506,040 | 16,378 | 1,543 | 90 | 18,062 | 1,944 | 110 | 17,993 | 2,376 | 151 | 11% | 16.7 | 1,954 |
| Buffalo-Niagara Falls (MSA) | 10.82% | NA | NA | 2,741 | 1,016 | 64 | 2,882 | 977 | 62 | 2,180 | 603 | 51 | 33% | 14.7 | 865 |
| Charlotte-Gastonia-Rock Hill (MSA) | 14.74% | 590,600 | 87,028 | 18,214 | 4,860 | 434 | 20,067 | 3,879 | 319 | 24,001 | 6,128 | 423 | 24% | 12.6 | 4,956 |
| Chicago-Gary-Kenosha (CMSA) | 26.87% | 3,415,900 | 917,790 | 35,378 | 7,242 | 548 | 38,258 | 7,318 | 529 | 43,641 | 9,069 | 622 | 20% | 13.9 | 7,876 |
| Cincinnati-Hamilton (CMSA) | 19.83% | 787,400 | 156,179 | 12,023 | 2,534 | 262 | 12,045 | 1,868 | 183 | 15,399 | 3,920 | 378 | 21% | 10.1 | 2,774 |
| Cleveland-Akron (CMSA) | 17.83% | 1,203,900 | 214,624 | 10,563 | 1,749 | 155 | 11,471 | 1,685 | 132 | 11,596 | 1,044 | 78 | 13% | 12.3 | 1,493 |
| Columbus (MSA) | 19.33% | 649,100 | 125,456 | 10,184 | 2,277 | 199 | 10,769 | 2,027 | 203 | 16,047 | 6,213 | 569 | 28% | 10.8 | 3,506 |
| Dallas-Fort Worth (CMSA) | 27.79% | 1,902,500 | 528,702 | 44,289 | 17,281 | 820 | 54,526 | 21,766 | 1,197 | 48,136 | 15,040 | 837 | 37% | 19.0 | 18,029 |
| Dall-Dallas TX PMSA | 30.58% | 1,278,200 | 390,855 | 33,479 | 13,660 | 680 | 39,767 | 16,795 | 857 | 35,950 | 12,893 | 715 | 40% | 19.2 | 14,449 |
| Dall-Fort Worth-Arlington | 22.39% | 624,300 | 139,791 | 10,810 | 3,621 | 140 | 14,759 | 4,971 | 340 | 12,186 | 2,147 | 122 | 28% | 17.8 | 3,580 |
| Denver-Boulder-Greeley (CMSA) | 26.38% | 1,022,100 | 269,618 | 24,774 | 6,648 | 456 | 31,269 | 9,935 | 761 | 29,360 | 5,926 | 373 | 26% | 14.2 | 7,503 |
| Detroit-Ann Arbor-Flint (CMSA) | 16.50% | 2,150,200 | 354,713 | 24,883 | 3,136 | 250 | 28,639 | 4,849 | 334 | 27,525 | 4,219 | 317 | 15% | 13.5 | 4,068 |
| Grand Rapids-Muskegon-Holland (MSA) | 13.47% | 373,700 | 50,344 | 7,151 | 1,393 | 80 | 7,720 | 1,647 | 106 | 7,340 | 997 | 83 | 18% | 15.0 | 1,346 |
| Greensboro-Winston-Salem-High Point (MSA) | 14.16% | 513,000 | 72,643 | 9,705 | 2,097 | 145 | 11,329 | 2,905 | 240 | 10,460 | 2,302 | 155 | 23% | 13.5 | 2,435 |
| Greenville-Spartanburg-Anderson (MSA) | 11.65% | 367,600 | 42,811 | 1,413 | 546 | 50 | 7,598 | 898 | 55 | 7,999 | 948 | 72 | 14% | 13.5 | 797 |
| Houston-Galveston-Brazoria (CMSA) | 28.48% | 1,714,600 | 488,385 | 29,103 | 10,933 | 642 | 46,864 | 20,189 | 1,288 | 36,637 | 10,429 | 583 | 37% | 16.5 | 13,850 |
| Indianapolis (MSA) | 20.16% | 668,800 | 134,828 | 13,268 | 2,188 | 158 | 16,232 | 3,045 | 224 | 15,919 | 1,751 | 142 | 15% | 13.3 | 2,328 |
| Jacksonville (MSA) | 18.38% | 456,900 | 83,987 | 8,560 | 1,518 | 98 | 9,438 | 1,717 | 121 | 11,332 | 3,178 | 196 | 22% | 15.5 | 2,138 |
| Kansas City (MSA) | 17.42% | 743,100 | 129,420 | 13,507 | 2,911 | 166 | 13,802 | 2,389 | 133 | 16,445 | 3,927 | 281 | 21% | 15.9 | 3,076 |
| LA-Los Angeles-Long Beach | 64.24% | 3,239,300 | 2,081,057 | 9,829 | 2,978 | 188 | 11,226 | 4,243 | 263 | 13,896 | 5,514 | 279 | 36% | 17.4 | 4,245 |
| LA-Orange County CA PMS | NA | 951,300 | NA | 12,261 | 3,657 | 223 | 9,704 | 2,031 | 128 | 12,278 | 3,905 | 212 | 28% | 17.0 | 3,198 |
| LA-Riverside-San Bernard | 13.49% | 1,154,700 | 155,721 | 15,195 | 1,217 | 97 | 18,654 | 2,285 | 149 | 20,714 | 1,736 | 120 | 10% | 14.3 | 1,746 |
| Las Vegas (MSA) | 32.51% | 536,800 | 174,533 | 30,876 | 9,255 | 843 | 32,605 | 10,367 | 921 | 28,800 | 6,352 | 612 | 28% | 10.9 | 8,658 |
| LosA-Los Angeles-Riverside-Orange County (CMSA) | 26.96% | 5,345,300 | 1,441,245 | | | | 42,882 | 8,884 | 562 | 51,198 | 11,777 | 658 | 22% | 16.9 | 6,887 |
| Louisville (MSA) | 17.63% | 439,800 | 77,539 | 5,778 | 777 | 86 | 7,549 | 1,449 | 105 | 7,624 | 1,691 | 138 | 19% | 11.9 | 1,306 |
| Miami-Fort Lauderdale FL P | 42.51% | 851,300 | 361,883 | 12,981 | 5,352 | 324 | 12,483 | 3,327 | 271 | 12,020 | 3,233 | 157 | 32% | 15.8 | 3,971 |
| Miami-Fort Lauderdale (CMSA) | 40.85% | 1,580,900 | 645,816 | 22,723 | 9,636 | 508 | 23,434 | 8,146 | 474 | 25,707 | 9,458 | 432 | 38% | 19.3 | 9,080 |
| Miami-Miami FL PMSA | 39.50% | 729,600 | 288,188 | 9,742 | 4,284 | 184 | 10,951 | 4,819 | 203 | 13,687 | 6,225 | 275 | 45% | 23.2 | 5,109 |
| Milwaukee-Racine (CMSA) | 18.70% | 691,000 | 129,237 | 7,393 | 2,589 | 192 | 8,183 | 2,951 | 218 | 7,935 | 2,425 | 167 | 34% | 13.8 | 2,655 |
| Minneapolis-St. Paul (MSA) | 24.30% | 1,133,200 | 275,409 | 16,664 | 2,058 | 155 | 20,884 | 2,899 | 194 | 23,010 | 3,588 | 169 | 14% | 16.5 | 2,848 |

## Table A2- Units Allowed by Metropolitan Area, 1997 to 1999

| | % 1990 | 99 Total | 99 INVENT. | 1997 | | | 1998 | | | 1999 | | | 97-98-99 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 and + | Inventory | 5 AND + | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Proportion multi/total | Units per building | Units allowed |
| Nashville (MSA) | 20.18% | 494,800 | 99,863 | 12,393 | 2,798 | 143 | 12,419 | 1,631 | 106 | 13,446 | 2,210 | 154 | 17% | 16.5 | 2,213 |
| New Orleans (MSA) | 16.71% | 546,800 | 91,359 | 4,134 | 397 | 24 | 4,381 | 549 | 34 | 4,422 | 1,032 | 28 | 15% | 23.0 | 659 |
| New York-North NJ-Long Island (CMSA) | 36.68% | 6,978,600 | 2,559,836 | 44,529 | 10,008 | 343 | 51,695 | 12,770 | 467 | 53,911 | 13,228 | 578 | 24% | 25.9 | 12,002 |
| NewY-Bergen-Passaic | 19.09% | 498,400 | 95,163 | 2,165 | 690 | 20 | 2,440 | 931 | 18 | 2,216 | 464 | 43 | 31% | 25.7 | 695 |
| NewY-Middlesex-Somerset-Hunterton | 18.34% | 424,100 | 77,770 | 5,964 | 738 | 45 | 6,220 | 867 | 72 | 5,943 | 829 | 48 | 13% | 14.8 | 811 |
| NewY-Monmouth-Ocean | 11.54% | 481,000 | 55,531 | 6,667 | 213 | 6 | 7,211 | 287 | 21 | 7,145 | 430 | 22 | 4% | 19.0 | 310 |
| NewY-Nassau-Suffolk | 8.40% | 966,900 | 81,260 | 5,329 | 928 | 55 | 5,881 | 631 | 64 | 6,262 | 1,095 | 97 | 15% | 12.3 | 885 |
| NewY-Newark | 22.42% | 721,900 | 161,868 | 4,146 | 514 | 24 | 4,549 | 322 | 12 | 5,241 | 723 | 37 | 11% | 21.4 | 520 |
| Norfolk-Virginia Beach-Newport (MSA) | 20.02% | NA | NA | 7,581 | 1,102 | 83 | 8,508 | 1,216 | 97 | 8,617 | 989 | 62 | 13% | 13.7 | 1,102 |
| NewY-New York NY PMSA | 57.60% | 3,520,900 | 2,027,873 | 11,619 | 5,758 | 130 | 13,532 | 6,663 | 146 | 15,341 | 6,734 | 205 | 47% | 39.8 | 6,385 |
| Oklahoma City (MSA) | 16.89% | 459,800 | 77,657 | 5,768 | 1,711 | 112 | 6,852 | 1,959 | 122 | 5,964 | 654 | 62 | 23% | 14.6 | 1,441 |
| Omaha (MSA) | 20.69% | 281,700 | 58,297 | 5,476 | 2,191 | 88 | 5,555 | 2,055 | 91 | 5,026 | 1,033 | 41 | 33% | 24.0 | 1,760 |
| Orlando (MSA) | 21.20% | 597,200 | 126,615 | 21,391 | 7,431 | 452 | 25,758 | 10,588 | 711 | 29,502 | 12,820 | 799 | 40% | 15.7 | 10,280 |
| Philadelphia-Wilmington-Atlantic City (CMSA) | 16.10% | 2,026,900 | 326,322 | 22,024 | 3,573 | 198 | 16,859 | 2,225 | 176 | 16,693 | 3,105 | 157 | 16% | 16.8 | 2,968 |
| Phoenix-Mesa (MSA) | 23.85% | 1,222,200 | 291,441 | 43,224 | 10,620 | 877 | 47,802 | 10,825 | 722 | 47,994 | 9,012 | 745 | 22% | 13.0 | 10,152 |
| Pittsburgh (MSA) | 13.18% | 1,001,500 | 132,032 | 6,064 | 1,306 | 102 | 6,381 | 1,221 | 96 | 7,163 | 1,698 | 98 | 22% | 14.3 | 1,408 |
| Portland-Salem (CMSA) | 19.16% | 871,100 | 166,927 | 22,275 | 7,661 | 558 | 20,257 | 6,090 | 496 | 17,091 | 3,502 | 214 | 29% | 13.6 | 5,751 |
| Raleigh-Durham-Chapel Hill (MSA) | 21.02% | 416,200 | 87,472 | 16,827 | 4,538 | 279 | 17,900 | 5,547 | 431 | 15,013 | 3,211 | 186 | 27% | 14.8 | 4,432 |
| Richmond-Petersburg (MSA) | 17.68% | 409,200 | 72,347 | 7,454 | 1,705 | 102 | 7,318 | 929 | 89 | 7,834 | 1,260 | 116 | 17% | 12.7 | 1,298 |
| Sacramento-Yolo (CMSA) | 18.20% | 699,800 | 127,364 | 9,804 | 1,204 | 116 | 14,336 | 3,421 | 266 | 14,477 | 3,316 | 242 | 21% | 12.7 | 2,647 |
| Salt Lake City-Ogden (MSA) | 16.59% | 460,100 | 76,324 | 10,564 | 2,165 | 154 | 10,453 | 1,853 | 103 | 9,474 | 1,498 | 95 | 18% | 15.7 | 1,839 |
| San Antonio (MSA) | 20.41% | 566,400 | 115,582 | 9,007 | 2,133 | 155 | 9,562 | 993 | 75 | 13,265 | 4,738 | 296 | 25% | 15.0 | 2,621 |
| San Diego (MSA) | 28.19% | 994,300 | 280,305 | 11,139 | 2,385 | 163 | 11,891 | 2,291 | 179 | 16,234 | 5,888 | 340 | 27% | 15.5 | 3,521 |
| San Francisco-Oakland-San Jose (CMSA) | 23.59% | 2,618,400 | 617,641 | 26,528 | 8,468 | 396 | 29,065 | 10,617 | 511 | 26,340 | 8,871 | 400 | 34% | 21.4 | 9,319 |
| SanFran-Oakland CA PMSA | 22.81% | 881,500 | 201,049 | 9,723 | 2,170 | 111 | 9,973 | 2,738 | 157 | 8,864 | 1,884 | 68 | 24% | 20.2 | 2,264 |
| SanFran-San Francisco CA PMS | 32.39% | NA | NA | 3,914 | 2,111 | 77 | 5,262 | 3,107 | 120 | 4,443 | 2,344 | 71 | 56% | 28.2 | 2,521 |
| SanFran-San Jose CA PMSA | 22.23% | 575,000 | 127,850 | 8,310 | 3,866 | 173 | 7,506 | 3,314 | 138 | 6,806 | 3,298 | 167 | 46% | 21.9 | 3,493 |
| Seattle-Tacoma-Bremerton (CMSA) | 24.55% | NA | NA | 25,347 | 6,970 | 572 | 30,525 | 11,077 | 767 | 28,288 | 10,278 | 546 | 34% | 15.0 | 9,442 |
| St. Louis (MSA) | 15.08% | 1,078,500 | 162,632 | 11,084 | 1,095 | 65 | 12,335 | 1,254 | 90 | 12,671 | 1,414 | 118 | 10% | 13.8 | 1,254 |
| Tampa-St. Petersburg-Clearwater (MSA) | 20.98% | 1,138,300 | 238,772 | 16,986 | 5,713 | 293 | 18,859 | 6,756 | 380 | 23,218 | 9,347 | 559 | 37% | 17.7 | 7,272 |
| Baltimore MD (PMSA) | 18.49% | 1,042,100 | 192,735 | 10,638 | 2,021 | 168 | 11,193 | 2,792 | 298 | 13,346 | 3,065 | 157 | 22% | 12.6 | 2,626 |
| Washington-Baltimore (CMSA) | 27.05% | 2,843,600 | 769,145 | 42,082 | 8,928 | 583 | 49,472 | 11,495 | 690 | 51,851 | 12,361 | 551 | 23% | 18.0 | 10,928 |

## Table A2- Units Allowed by Metropolitan Area, 1997 to 1999

|  | % 1990 5 and + | 99 Total Inventory | 99 INVENT. 5 AND + | 1997 |  |  | 1998 |  |  | 1999 |  |  | 97-98-99 |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Total Units | Multi Units | Multi Buildings | Proportion multi/total | Units per building | Units allowed |
| Washington DC-MD-VA- (PMSA) | 32.21% | 1,801,500 | 580,217 | 30,843 | 6,907 | 415 | 37,603 | 8,703 | 392 | 37,866 | 9,266 | 391 | 23% | 20.8 | 8,292 |

Source: US Bureau of Census

## Table A3- Rental Housing Vacancy Rate by Metropolitan Area - 1996-1999

| | Vacancy Rate | | | | Annual Rent Increase | | | |
|---|---|---|---|---|---|---|---|---|
| | 1996 | 1997 | 1998 | 1999 | 1998-1999 | 1999-2000 | 1998-2000 | 2000-2004 |
| Atlanta (MSA) | 10.5 | 10.2 | 9.6 | 9.8 | 3.80% | 2.50% | 3.15% | 3.30% |
| Austin-San Marcos (MSA) | 8.8 | 8.4 | 9.3 | 8.2 | 4.90% | 2.10% | 3.50% | 4.30% |
| Boston | 5.9 | 4 | 4.1 | 3.1 | 4.80% | 5.10% | 4.95% | 7.60% |
| Buffalo-Niagara Falls (MSA) | 16.5 | 15.4 | 16.8 | 14.9 | | | | |
| Charlotte-Gastonia-Rock Hill (MSA) | 4.5 | 8.8 | 10.4 | 7.9 | 3.80% | 3.30% | 3.55% | 4.30% |
| Chicago | 7.9 | 8.2 | 7.8 | 6.5 | 3.90% | 3.70% | 3.80% | 5.70% |
| Cincinnati-Hamilton (CMSA) | 7.8 | 10.3 | 11.5 | 11.9 | 2.20% | 3.50% | 2.85% | 5.50% |
| Cleveland-Akron (CMSA) | 8.4 | 10.1 | 10.3 | 11.3 | 4.70% | 3.40% | 4.05% | 4.50% |
| Columbus (MSA) | 9.4 | 8.1 | 7.9 | 7.4 | 2.20% | 3.60% | 2.90% | 4.80% |
| Dall-Dallas (CMSA) | 8.9 | 6.8 | 5.9 | 7.2 | 4.90% | 4.20% | 4.55% | 4.80% |
| Dall-Fort Worth (PMSA) | 5.6 | 6.9 | 6.8 | 6.1 | 4.90% | 4.20% | 4.55% | 5.10% |
| Denver-Boulder-Greeley (CMSA) | 5.2 | 2.4 | 4 | 5.6 | 5.50% | 3.80% | 4.65% | 4.40% |
| Detroit-Ann Arbor-Flint (CMSA) | 8.8 | 7.2 | 7.4 | 8.5 | 3.10% | 3.60% | 3.35% | 4.80% |
| Grand Rapids-Muskegon-Holland (MSA) | 15.6 | 13.6 | 6.2 | 7.3 | | | | |
| Greensboro-Winston-Salem-High Point (MSA) | 3.3 | 7.9 | 6.3 | 8.7 | | | | |
| Greenville-Spartanburg-Anderson (MSA) | 9.9 | 9.8 | 13.4 | 10.3 | | | | |
| Houston-Galveston-Brazoria (CMSA) | 8 | 9.8 | 9.6 | 9.8 | 3.60% | 2.70% | 3.15% | 5.90% |
| Indianapolis (MSA) | 6.8 | 10.3 | 10.5 | 13.3 | 3.10% | 2.40% | 2.75% | 4.50% |
| Jacksonville (MSA) | 7.2 | 5.8 | 6.8 | 7.1 | 1.80% | 2.40% | 2.10% | 3.60% |
| Kansas City (MSA) | 7.9 | 6.8 | 7.5 | 6.7 | 4.70% | 2.80% | 3.75% | 4.40% |
| Las Vegas (MSA) | 7.4 | 6.3 | 9.4 | 9.4 | | | | |
| LosA-Los Angeles-Long Beach, CA | 8.7 | 8 | 6.9 | 5.1 | 2.80% | 3.60% | 3.20% | 5.10% |
| LosA-San Bernadino-Riverside-Orange County | 8.6 | 9.3 | 9.2 | 8.1 | 2.80% | 4.70% | 3.75% | |
| LosA-Orange County (PMSA) | 5.9 | 6.2 | 4.4 | 4.2 | 2.80% | 5.00% | 3.90% | 5.80% |
| Louisville (MSA) | 4.1 | 3.7 | 7.9 | 9.2 | | | | |
| Miami-Ft. Lauderdale (PMSA) | 8.6 | 9.3 | 5.7 | 8.1 | 1.80% | 2.70% | 2.25% | 3.30% |
| Miami-Miami (PMSA) | 8.3 | 10 | 9.8 | 8.5 | 1.80% | 3.40% | 2.60% | 3.60% |
| Milwaukee-Racine (CMSA) | 7.4 | 8.4 | 8.9 | 6.5 | | | 0.00% | 3.30% |
| Minneapolis-St. Paul (MSA) | 3.9 | 3.9 | 3.9 | 4.2 | 2.90% | 3.10% | 3.00% | 7.40% |
| Nashville (MSA) | 3.9 | 6.6 | 5.4 | 4.4 | 3.80% | 3.50% | 3.65% | 3.30% |
| New Orleans (MSA) | 6.8 | 9.3 | 12.3 | 16.3 | | | | |
| NewY-Bergen-Passaic | 1.9 | 2.2 | 2.9 | 2.8 | | | | |
| NewY-Middlesex-Somerset-Hunterton | 6.1 | 2.6 | 3.5 | 2.3 | | | | |
| NewY-Monmouth-Ocean | 2.5 | 4.3 | 4.2 | 6.2 | | | | |
| NewY-Nassau-Suffolk | 5.1 | 4.3 | 4.9 | 1.9 | | | | |
| NewY-New York | 5.5 | 5.2 | 5 | 4.7 | 3.40% | 3.40% | 3.40% | 5.80% |
| NewY-Newark | 11.4 | 6.2 | 3.7 | 4.6 | | | | |
| Norfolk-Virginia Beach-Newport (MSA) | 6.5 | 5.7 | 7.6 | 4.2 | | | | |
| Oklahoma City (MSA) | 10.7 | 10 | 12.2 | 14.9 | | | | |
| Omaha (MSA) | 7.2 | 5.1 | 7.9 | 9 | | | | |
| Orlando (MSA) | 11 | 6.5 | 4.7 | 6.8 | 1.80% | 0.20% | 1.00% | 4.60% |
| Philadelphia-Wilmington-Atlantic City (CMSA) | 10 | 11.4 | 10.3 | 10.8 | 2.60% | 3.10% | 2.85% | 5.00% |
| Phoenix-Mesa (MSA) | 8 | 6.3 | 7.4 | 9.2 | 5.50% | 4.30% | 4.90% | 4.30% |
| Pittsburgh (MSA) | 8.7 | 10.3 | 10.4 | 12.5 | | | 0.00% | 3.20% |
| Portland-Salem (CMSA) | 5.2 | 5.2 | 7.7 | 7.4 | 3.60% | 2.60% | 3.10% | 2.60% |
| Raleigh-Durham-Chapel Hill (MSA) | 10 | 11.9 | 15.3 | 11.8 | | | 0.00% | 4.20% |
| Richmond-Petersburg (MSA) | 10.1 | 7.5 | 5.2 | 11 | | | 0.00% | 5.20% |
| Sacramento-Yolo (CMSA) | 8.1 | 5 | 4.9 | 6.2 | 7.80% | 4.70% | 6.25% | 5.10% |
| Salt Lake City-Ogden (MSA) | 4.6 | 5.4 | 6.4 | 8.5 | | | | |
| San Antonio (MSA) | 7 | 7.1 | 6.6 | 6.8 | | | | |
| San Diego (MSA) | 6 | 5.1 | 5.1 | 4.2 | 4.90% | 5.70% | 5.30% | 6.20% |
| SanFran-San Francisco | 3.1 | 1.7 | 2.5 | 3.3 | 7.80% | 5.10% | 6.45% | 7.90% |

## Table A3- Rental Housing Vacancy Rate by Metropolitan Area - 1996-1999

| | Vacancy Rate | | | | Annual Rent Increase | | | |
|---|---|---|---|---|---|---|---|---|
| | 1996 | 1997 | 1998 | 1999 | 1998-1999 | 1999-2000 | 1998-2000 | 2000-2004 |
| SanFran-San Jose | 1.8 | 2 | 2.2 | 2.1 | 7.80% | 7.00% | 7.40% | 5.40% |
| SanFran-Oakland | 6.8 | 4.4 | 6 | 4.6 | 7.80% | 6.80% | 7.30% | 6.20% |
| Seattle-Tacoma-Bremerton (CMSA) | 7.1 | 3.4 | 2.6 | 3.9 | 5.30% | 4.30% | 4.80% | 3.80% |
| St. Louis (MSA) | 5.9 | 7.8 | 10.3 | 9.9 | 2.20% | 2.80% | 2.50% | 3.90% |
| Tampa-St. Petersburg-Clearwater (MSA) | 7.4 | 6.2 | 7.1 | 9.2 | 2.50% | 2.20% | 2.35% | 3.90% |
| Wash-Baltimore | 7.1 | 10.7 | 6 | 7.2 | 3.30% | 4.40% | 3.85% | 5.10% |
| Wash-Washington, DC | 8.8 | 8.1 | 8.3 | 6.6 | 3.30% | 2.20% | 2.75% | 6.50% |

Sources: US Bureau of Census for vacancy rates,
Torto Wheaton for the 1998-2000 rent increase and REIS for the projected rent increase

## Table A4- Non-agricultural Jobs by Metropolitan Area -(in 000)

|  | December 1998 | December 1999 | 98-99 |
|---|---|---|---|
| Atlanta | 2,093.3 | 2,206.9 | 5.43% |
| Austin-San Marcos | 612.6 | 643.2 | 5.00% |
| Boston CMSA | 3,029.6 | 3,062.6 | 1.09% |
| Buffalo-Niagara Falls | 554.6 | 554.3 | -0.05% |
| Charlotte-Gastonia-Rock Hill | 791.8 | 803.6 | 1.49% |
| Chicago CMSA | 4,623.5 | 4,666.1 | 0.92% |
| Cincinnati | 881.3 | 897.7 | 1.86% |
| Cleveland CMSA | 1,496.1 | 1,507.4 | 0.76% |
| Columbus | 849.9 | 862.2 | 1.45% |
| Dallas CMSA | 2,628.5 | 2,721.9 | 3.55% |
| Dall-Dallas TX PMSA | 1,873.6 | 1,936.5 | 3.36% |
| Dall-Fort Worth-Arlington PMSA | 754.9 | 785.4 | 4.04% |
| Denver CMSA | 1,370.4 | 1,404.3 | 2.47% |
| Detroit CMSA | 2,628 | 2,652.6 | 0.94% |
| Grand Rapids-Muskegon-Holland | 581 | 597.2 | 2.79% |
| Greensboro--Winston-Salem--High Point | 660.4 | 666.1 | 0.86% |
| Greenville-Spartanburg-Anderson | 476.1 | 488.8 | 2.67% |
| Houston CMSA | 2,190.8 | 2,247.9 | 2.61% |
| Indianapolis | 868.1 | 877.8 | 1.12% |
| Jacksonville | 544.5 | 562.5 | 3.31% |
| Kansas City | 969.4 | 977.4 | 0.83% |
| Las Vegas | 685 | 728.2 | 6.31% |
| Los Angeles CMSA | 6,515.6 | 6,669.1 | 2.36% |
| LA-Los Angeles-Long Beach | 4,025.6 | 4,098.3 | 1.81% |
| LA-Orange County CA PMSA | 1,325.6 | 1,365.8 | 3.03% |
| LA-Riverside-San Bernard | 904.9 | 937.8 | 3.64% |
| Louisville | 580.5 | 595 | 2.50% |
| Memphis | 596.9 | 602.4 | 0.92% |
| Miami CMSA | 1,662.7 | 1,701.7 | 2.35% |
| Miami-Fort Lauderdale FL PMSA | 663.9 | 681.9 | 2.71% |
| Miami-Miami FL PMSA | 998.8 | 1,019.8 | 2.10% |
| Milwaukee CMSA | 943.3 | 952.7 | 1.00% |
| Minneapolis-St. Paul | 1,709.9 | 1,745.7 | 2.09% |
| Nashville | 661.8 | 672.1 | 1.56% |
| New Orleans | 633.6 | 631 | -0.41% |
| New York CMSA | 13,399.3 | 13,658.2 | 1.93% |
| NewY-Bergen-Passaic | 669.8 | 680.1 | 1.54% |
| NewY-Middlesex-Somerset-Hunterton | 634.4 | 647.2 | 2.02% |
| NewY-Monmouth-Ocean | 368.5 | 376.2 | 2.09% |
| NewY-Nassau-Suffolk | 1,184.2 | 1,214.5 | 2.56% |
| NY-New York NY PMSA | 8,417.7 | 8581 | 1.94% |
| NewY-Newark | 986.3 | 1,006.5 | 2.05% |
| Norfolk-Virginia Beach-Newport News | 689.1 | 698.7 | 1.39% |
| Oklahoma City | 522.6 | 535.7 | 2.51% |
| Omaha | 415.4 | 410 | -1.30% |
| Orlando | 868.7 | 907.2 | 4.43% |
| Philadelphia PMSA | 2,360.6 | 2,389 | 1.20% |
| Phoenix-Mesa | 1,515.7 | 1,556.6 | 2.70% |
| Pittsburgh | 1,109.4 | 1,120.2 | 0.97% |
| Portland CMSA | 1,093.2 | 1,123.4 | 2.76% |
| Raleigh-Durham-Chapel Hill | 677.8 | 684.7 | 1.02% |
| Richmond-Petersburg | 544.6 | 563.5 | 3.47% |
| Sacramento CMSA | 751.9 | 773.9 | 2.93% |

## Table A4- Non-agricultural Jobs by Metropolitan Area -(in 000)

| | December 1998 | December 1999 | 98-99 |
|---|---|---|---|
| Salt Lake City-Ogden | 704.9 | 719 | 2.00% |
| San Antonio | 694.4 | 716.1 | 3.13% |
| San Diego | 1,122.9 | 1,139 | 1.43% |
| San Francisco CMSA | 3,476.2 | 3,540.9 | 1.86% |
| SanFran-Oakland CA PMSA | 997.4 | 1,029.6 | 3.23% |
| SanFran-San Francisco CA PMSA | 1,035.1 | 1,049.4 | 1.38% |
| SanFran-San Jose CA PMSA | 965.5 | 975.8 | 1.07% |
| Seattle CMSA | 1,809 | 1,848.3 | 2.17% |
| St. Louis | 1,326.6 | 1341 | 1.09% |
| Tampa-St. Petersburg-Clearwater | 1,167.6 | 1,229.6 | 5.31% |
| Washington CMSA | 3,891.4 | 3,974.6 | 2.14% |
| Wash-Baltimore MD PMSA | 1,209.9 | 1,226.7 | 1.39% |
| Wash-Washington DC-PMSA | 2,611.5 | 2,676.2 | 2.48% |

Source: Bureau of Labor Statistics

# Table A5- Analysis of Metropolitan Areas of the Large Metropolitan Municipalities

(Areas building more than 800 units in buildings with five and more units)

| | Population | | Permits | | | | | | | | | | | | Density | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1997 | 1997 | | | 1998 | | | 1999 | | | 97-98-99 | | | Units/ 10,000 | Units/ building | % permits 5 and + |
| | | | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | | | |
| ***Boston-Worcester-Lawrence, CMSA*** | 5,633,060 | 5,593,425 | 16,378 | 1,543 | 90 | 18,062 | 1,944 | 110 | 17,993 | 2,376 | 151 | 17,478 | 1,954 | 117 | 3.47 | 16.7 | 11.18% |
| Boston, PMSA | 3,289,096 | 3,273,212 | 7,504 | 955 | 55 | 7,967 | 1,203 | 69 | 8,459 | 1,880 | 101 | 7,977 | 1,346 | 75 | 4.09 | 17.9 | 16.87% |
| Brockton, MA PMSA | 251,043 | 248,314 | 752 | 8 | 1 | 829 | 0 | 0 | 786 | 0 | 0 | 789 | 3 | 0 | 0.11 | 8.0 | 0.34% |
| Fitchburg-Leominster, PMSA | 141,527 | 140,564 | 369 | 0 | 0 | 478 | 32 | 3 | 465 | 15 | 3 | 437 | 16 | 2 | 1.11 | 7.8 | 3.58% |
| Lawrence, PMSA | 382,118 | 377,075 | 1,440 | 0 | 0 | 1,912 | 412 | 14 | 1,458 | 31 | 4 | 1,603 | 148 | 6 | 3.86 | 24.6 | 9.21% |
| Lowell, PMSA | 295,459 | 293,034 | 972 | 10 | 2 | 1,058 | 43 | 6 | 1,068 | 227 | 14 | 1,033 | 93 | 7 | 3.16 | 12.7 | 9.04% |
| Manchester, PMSA | 187,483 | 18,437 | 1,181 | 361 | 22 | 1,016 | 27 | 4 | 996 | 25 | 4 | 1,064 | 138 | 10 | 7.34 | 13.8 | 12.93% |
| Nashua, PMSA | 182,482 | 180,156 | 753 | 24 | 1 | 880 | 28 | 3 | 904 | 88 | 9 | 846 | 47 | 4 | 2.56 | 10.8 | 5.52% |
| New Bedford, PMSA | 175,816 | 175,143 | 469 | 0 | 0 | 476 | 0 | 0 | 463 | 0 | 0 | 469 | 0 | 0 | 0.00 | | 0.00% |
| Portsmouth-Rochester, PMSA | 235,547 | 233,249 | 1,060 | 75 | 8 | 1,272 | 141 | 7 | 1,310 | 41 | 4 | 1,214 | 86 | 6 | 3.64 | 13.5 | 7.06% |
| Worcester, PMSA | 492,489 | 488,308 | 1,878 | 110 | 1 | 2,174 | 58 | 4 | 2,084 | 69 | 12 | 2,045 | 79 | 6 | 1.60 | 13.9 | 3.86% |
| ***Chicago-Gary-Kenosha, CMSA*** | 8,809,846 | 8,750,864 | 35,378 | 7,242 | 548 | 38,258 | 7,318 | 529 | 43,641 | 9,069 | 622 | 39,092 | 7,876 | 566 | 8.94 | 13.9 | 20.15% |
| Chicago, PMSA | 7,939,351 | 7,883,452 | 31,248 | 6,614 | 495 | 33,713 | 6,434 | 459 | 38,616 | 7,946 | 548 | 34,526 | 6,998 | 501 | 8.81 | 14.0 | 20.27% |
| Gary, PMSA | 624,049 | 622,596 | 2,847 | 320 | 25 | 3,021 | 361 | 31 | 3,529 | 699 | 50 | 3,132 | 460 | 35 | 7.37 | 13.0 | 14.69% |
| Kankakee, PMSA | 102,107 | 102,018 | 507 | 101 | 13 | 450 | 51 | 7 | 375 | 12 | 1 | 444 | 55 | 7 | 5.35 | 7.8 | 12.31% |
| Kenosha, PMSA | 144,339 | 142,798 | 776 | 207 | 15 | 1,074 | 472 | 32 | 1,121 | 412 | 23 | 990 | 364 | 23 | 25.20 | 15.6 | 36.72% |
| ***Dallas-Fort Worth CMSA*** | 4,802,463 | 4,677,781 | 44,289 | 17,281 | 820 | 54,526 | 21,766 | 1,197 | 48,136 | 15,040 | 837 | 48,984 | 18,029 | 951 | 37.54 | 19.0 | 36.81% |
| Dallas, PMSA | 3,209,886 | 3,123,013 | 33,479 | 13,660 | 680 | 39,767 | 16,795 | 857 | 35,950 | 12,893 | 715 | 36,399 | 14,449 | 751 | 45.02 | 19.2 | 39.70% |
| Fort Worth-Arlington PMSA | 1,592,577 | 1,554,768 | 10,810 | 3,621 | 140 | 14,759 | 4,971 | 340 | 12,186 | 2,147 | 122 | 12,585 | 3,580 | 201 | 22.48 | 17.8 | 28.44% |
| ***Los Angeles-Riverside-Orange C. CMSA*** | 15,781,273 | 15549614 | 39,614 | 7,877 | 511 | 42,882 | 8,884 | 562 | 51,198 | 11,777 | 658 | 44,565 | 9,513 | 577 | 6.03 | 16.5 | 21.35% |
| Los Angeles-Long Beach PMSA | 9,213,533 | 9,116,506 | 9,829 | 2,978 | 188 | 11,226 | 4,243 | 263 | 13,896 | 5,514 | 279 | 11,650 | 4,245 | 243 | 4.61 | 17.4 | 36.44% |
| Orange County PMSA | 2,721,701 | 2,663,561 | 12,261 | 3,657 | 223 | 9,704 | 2,031 | 128 | 12,278 | 3,905 | 212 | 11,414 | 3,198 | 188 | 11.75 | 17.0 | 28.01% |
| Riverside-San Bern. PMSA | 3,114,072 | 3,047,741 | 15,195 | 1,217 | 97 | 18,654 | 2,285 | 149 | 20,714 | 1,736 | 120 | 18,188 | 1,746 | 122 | 5.61 | 14.3 | 9.60% |
| Ventura PMSA | 731,967 | 721,806 | 2,329 | 25 | 3 | 3,298 | 325 | 22 | 4,310 | 622 | 47 | 3,312 | 324 | 24 | 4.43 | 13.5 | 9.78% |
| ***Miami-Fort Laud. CMSA*** | 3,655,844 | 3,601,914 | 22,723 | 9,636 | 508 | 23,434 | 8,146 | 474 | 25,707 | 9,458 | 432 | 23,955 | 9,080 | 471 | 24.84 | 19.3 | 37.90% |
| Fort Lauderdale PMSA | 1,503,407 | 1,472,927 | 12,981 | 5,352 | 324 | 12,483 | 3,327 | 271 | 12,020 | 3,233 | 157 | 12,495 | 3,971 | 251 | 26.41 | 15.8 | 31.78% |
| Miami PMSA | 2,152,437 | 2,128,987 | 9,742 | 4,284 | 184 | 10,951 | 4,819 | 203 | 13,687 | 6,225 | 275 | 11,460 | 5,109 | 221 | 23.74 | 23.2 | 44.58% |
| ***New York-North NJ-Long Is CMSA*** | 20,124,377 | 20,005,731 | 44,529 | 10,008 | 343 | 51,695 | 12,770 | 467 | 53,911 | 13,228 | 578 | 50,045 | 12,002 | 463 | 5.96 | 25.9 | 23.98% |
| Bergen-Passaic PMSA | 1,344,266 | 1,335,665 | 2,165 | 690 | 20 | 2,440 | 931 | 18 | 2,216 | 464 | 43 | 2,274 | 695 | 27 | 5.17 | 25.7 | 30.57% |

## Table A5- Analysis of Metropolitan Areas of the Large Metropolitan Municipalities

(Areas building more than 800 units in buildings with five and more units)

| | Population | | Permits | | | | | | | | | | | | Density | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1998 | 1997 | 1997 | | | 1998 | | | 1999 | | | 97-98-99 | | | Units/ 10,000 | Units/ building | % permits 5 and + |
| | | | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | Total | 5 and + | No. Bldg. | | | |
| Bridgeport PMSA | 443,354 | 441,522 | 1,070 | 39 | 4 | 1,270 | 5 | 1 | 1,081 | 107 | 4 | 1,140 | 50 | 3 | 1.14 | 16.8 | 4.41% |
| Danbury PMSA | 202,009 | 200,063 | 885 | 100 | 18 | 1,627 | 791 | 44 | 1,113 | 114 | 12 | 1,208 | 335 | 25 | 16.58 | 13.6 | 27.72% |
| Dutchess County PMSA | 265,317 | 263,758 | 823 | 69 | 10 | 927 | 59 | 8 | 1,205 | 138 | 13 | 985 | 89 | 10 | 3.34 | 8.6 | 9.00% |
| Jersey City PMSA | 557,159 | 554,508 | 702 | 444 | 1 | 1,788 | 1,148 | 17 | 2,049 | 1,509 | 21 | 1,513 | 1,034 | 13 | 18.55 | 79.5 | 68.32% |
| Middl.-Som.-Hunt. PMSA | 1,121,504 | 1,105,804 | 5,964 | 738 | 45 | 6,220 | 867 | 72 | 5,943 | 829 | 48 | 6,042 | 811 | 55 | 7.23 | 14.8 | 13.43% |
| Monmouth-Ocean PMSA | 1,093,253 | 1,079,408 | 6,667 | 213 | 6 | 7,211 | 287 | 21 | 7,145 | 430 | 22 | 7,008 | 310 | 16 | 2.84 | 19.0 | 4.42% |
| Nassau-Suffolk PMSA | 2,673,489 | 2,660,623 | 5,329 | 928 | 55 | 5,881 | 631 | 64 | 6,262 | 1,095 | 97 | 5,824 | 885 | 72 | 3.31 | 12.3 | 15.19% |
| New Haven-Meriden PMSA | 522,738 | 522,021 | 1,331 | 312 | 16 | 1,640 | 519 | 27 | 1,539 | 299 | 7 | 1,503 | 377 | 17 | 7.21 | 22.6 | 25.06% |
| New York PMSA | 8,692,782 | 8,650,425 | 11,619 | 5,758 | 130 | 13,532 | 6,663 | 146 | 15,341 | 6,734 | 205 | 13,497 | 6,385 | 160 | 7.35 | 39.8 | 47.31% |
| Newark PMSA | 1,952,407 | 1,943,455 | 4,146 | 514 | 24 | 4,549 | 322 | 12 | 5,241 | 723 | 37 | 4,645 | 520 | 24 | 2.66 | 21.4 | 11.19% |
| Newburgh PMSA | 369,392 | 365,394 | 1,548 | 58 | 8 | 1,940 | 245 | 24 | 2,122 | 309 | 40 | 1,870 | 204 | 24 | 5.52 | 8.5 | 10.91% |
| Stamford-Norwalk PMSA | 332,941 | 331,661 | 619 | 74 | 3 | 674 | 109 | 10 | 921 | 414 | 27 | 738 | 199 | 13 | 5.98 | 14.9 | 26.96% |
| Trenton PMSA | 331,629 | 329,797 | 1,063 | 21 | 2 | 1,393 | 193 | 3 | 1,149 | 63 | 2 | 1,202 | 92 | 2 | 2.78 | 39.6 | 7.68% |
| Waterbury PMSA | 222,137 | 221,627 | 598 | 50 | 1 | 603 | 0 | 0 | 584 | 0 | 0 | 595 | 17 | 0 | 0.75 | 50.0 | 2.80% |
| ***San Franc.-Oak.-San Jose CMSA*** | 6,816,047 | 6,717,623 | 26,528 | 8,468 | 396 | 29,065 | 10,617 | 511 | 26,340 | 8,871 | 400 | 27,311 | 9,319 | 436 | 13.67 | 21.4 | 34.12% |
| Oakland PMSA | 2,318,522 | 2,273,911 | 9,723 | 2,170 | 111 | 9,973 | 2,738 | 157 | 8,864 | 1,884 | 68 | 9,520 | 2,264 | 112 | 9.76 | 20.2 | 23.78% |
| San Francisco PMSA | 1,683,309 | 1,669,697 | 3,914 | 2,111 | 77 | 5,262 | 3,107 | 120 | 4,443 | 2,344 | 71 | 4,540 | 2,521 | 89 | 14.97 | 28.2 | 55.53% |
| San Jose PMSA | 1,641,215 | 1,620,453 | 8,310 | 3,866 | 173 | 7,506 | 3,314 | 138 | 6,806 | 3,298 | 167 | 7,541 | 3,493 | 159 | 21.28 | 21.9 | 46.32% |
| Santa Cruz-Watsonville PMSA | 242,994 | 238,393 | 733 | 132 | 16 | 559 | 154 | 14 | 463 | 123 | 12 | 585 | 136 | 14 | 5.61 | 9.7 | 23.30% |
| Santa Rosa PMSA | 433,304 | 426,156 | 1,961 | 130 | 8 | 3,062 | 857 | 46 | 3,036 | 595 | 37 | 2,686 | 527 | 30 | 12.17 | 17.4 | 19.63% |
| Vallejo-Fairfield-Napa PMSA | 496,703 | 489,013 | 1,887 | 59 | 11 | 2,703 | 447 | 36 | 2,728 | 627 | 45 | 2,439 | 378 | 31 | 7.60 | 12.3 | 15.48% |
| ***Wash.-Balt. CMSA*** | 7,285,206 | 7,213,299 | 42,082 | 8,928 | 583 | 49,472 | 11,495 | 690 | 51,851 | 12,361 | 551 | 47,802 | 10,928 | 608 | 15.00 | 18.0 | 22.86% |
| Baltimore PMSA | 2,483,952 | 2,475,952 | 10,638 | 2,021 | 168 | 11,193 | 2,792 | 298 | 13,346 | 3,065 | 157 | 11,726 | 2,626 | 208 | 10.57 | 12.6 | 22.40% |
| Hagerstown PMSA | 127,352 | 127,933 | 601 | 0 | 0 | 676 | 0 | 0 | 639 | 30 | 3 | 639 | 10 | 1 | 0.79 | 10.0 | 1.57% |
| Washington PMSA | 4,673,902 | 4,609,414 | 30,843 | 6,907 | 415 | 37,603 | 8,703 | 392 | 37,866 | 9,266 | 391 | 35,437 | 8,292 | 399 | 17.74 | 20.8 | 23.40% |

## Table A6- Population and Job Estimates by Certain Metropolitan Areas

| | | 1997 | 1998 | 1999 | 00-05 | | 2005 |
|---|---|---|---|---|---|---|---|
| | | | | estimate | in % | as a number | |
| Austin-San Marcos | Population (000)- July | 1,069.8 | 1,105.9 | 1,143.2 | 8.44% | 96.52 | 1,239.7 |
| Austin-San Marcos | Personal income in M$87 | | | | 15.05% | NA | |
| Austin-San Marcos | Employment (000): December | | 612.6 | 643.2 | 11.07% | 71.22 | 714.4 |
| Boston | Population (000)- July | 3,273.2 | 3,289.1 | 3,305.1 | 3.74% | 123.75 | 3,428.8 |
| Boston | Personal income in M$87 | | | | 9.31% | NA | |
| Boston | Employment (000): December | | 1,982.9 | 2,006.1 | 6.01% | 120.53 | 2,126.6 |
| Charlotte-Gastonia-Rock Hill | Population (000)- July | 803.6 | 791.8 | 780.2 | 5.77% | 44.99 | 825.2 |
| Charlotte-Gastonia-Rock Hill | Personal income in M$87 | | | | 11.62% | NA | |
| Charlotte-Gastonia-Rock Hill | Employment (000): December | | 1,383.1 | 1,351.7 | 7.32% | 98.93 | 1,450.6 |
| Chicago, IL | Population (000)- July | 4,267.1 | 4,221.5 | 4,176.4 | 3.72% | 155.41 | 4,331.8 |
| Chicago, IL | Personal income in M$87 | | | | 9.55% | NA | |
| Chicago, IL | Employment (000): December | | 7,939.3 | 7,883.4 | 5.92% | 467.01 | 8,350.4 |
| Columbus, OH | Population (000)- July | 1,456.4 | 1,469.6 | 1,482.9 | 4.86% | 72.11 | 1,555.0 |
| Columbus, OH | Personal income in M$87 | | | | 10.92% | NA | |
| Columbus, OH | Employment (000): December | | 849.9 | 862.2 | 7.25% | 62.49 | 924.7 |
| Denver-Boulder-Greeley, CO | Population (000)- July | 2,319 | 2,365.3 | 2,412.5 | 6.93% | 167.08 | 2,579.6 |
| Denver-Boulder-Greeley, CO | Personal income in M$87 | | | | 13.05% | NA | |
| Denverx[sic], CO | Employment (000): December | | 1,116.4 | 1,147.0 | 8.68% | 99.60 | 1,246.6 |
| Fort Worth-Arlington, TX | Population (000)- July | 1,554.8 | 1,592.6 | 1,631.3 | 6.44% | 105.09 | 1,736.4 |
| Fort Worth-Arlington, TX | Personal income in M$87 | | | | 12.51% | NA | |
| Fort Worth-Arlington, TX | Employment (000): December | | 754.9 | 785.4 | 8.79% | 69.02 | 854.4 |
| Jersey City | Population (000)- July | 554.5 | 557.1 | 559.7 | NA | NA | |
| Jersey City | Personal income in M$87 | | | | NA | NA | |
| Jersey City | Employment (000): December | | 249.3 | 251.6 | NA | NA | |
| Miami, FL | Population (000)- July | 1,019.8 | 998.8 | 978.2 | 4.59% | 44.92 | 1,023.1 |
| Miami, FL | Personal income in M$87 | | | | 10.82% | NA | |
| Miami, FL | Employment (000): December | | 2,152.4 | 2,128.9 | 5.85% | 124.45 | 2,253.3 |
| Middl.-Som-Hunterdon | Population (000)- July | 1,105.8 | 1,121.5 | 1,137.4 | 5.36% | 61.00 | 1,198.4 |
| Middl-Som-Hunterdon | Personal income in M$87 | | | | 11.19% | NA | |
| Middl-Som-Hunterdon | Employment (000): December | | 634.4 | 647.2 | 9.56% | 61.85 | 709.1 |
| Minneapolis-St. Paul | Population (000)- July | 2,794.9 | 2,831.2 | 2,868.0 | 4.82% | 138.28 | 3,006.3 |
| Minneapolis-St. Paul | Personal income in M$87 | | | | 10.30% | NA | |
| Minneapolis-St. Paul, | Employment (000): December | | 1,709.9 | 1,745.7 | 6.50% | 113.42 | 1,859.1 |
| Nassau-Suffolk | Population (000)- July | 1,214.5 | 1,184.2 | 1,154.7 | 1.30% | 15.01 | 1,169.7 |
| Nassau-Suffolk | Personal income in M$87 | | | | 6.69% | NA | |
| Nassau-Suffolk | Employment (000): December | | 2,673.5 | 2,660.6 | 4.98% | 132.51 | 2,793.1 |
| New York, NY | Population (000)- July | 8,650.4 | 8,692.8 | 8,735.4 | 0.95% | 83.00 | 8,818.0 |
| New York, NY | Personal income in M$87 | | | | 6.14% | NA | |
| New York, NY | Employment (000): December | | 4,158.2 | 4,263.8 | 2.12% | 90.34 | 4,354.1 |
| Norfolk-Virg. Beach-Newp | Population (000)- July | 1,544.8 | 1,542.1 | 1,539.4 | 4.15% | 63.92 | 1,603.3 |
| Norfolk-Virg. Beach-Newp | Personal income in M$87 | | | | 9.88% | NA | |
| Norfolk-Virg. Beach-Newp | Employment (000): December | | 689.1 | 698.7 | 5.91% | 41.31 | 740.0 |
| Portland-Salem, OR-WA | Population (000)- July | 2,114.5 | 2,149.1 | 2,184.3 | 6.45% | 140.85 | 2,325.1 |
| Portland-Salem, OR-WA | Personal income in M$87 | | | | 12.43% | NA | |
| Portland-Salem, OR-WA | Employment (000): December | | 957.6 | 986.4 | 8.15% | 80.38 | 1,066.8 |
| San Diego, CA | Employment (000): December | 2,723.7 | 2,780.6 | 2,838.7 | 8.21% | 232.93 | 3,071.6 |
| San Diego, CA | Personal income in M$87 | | | | 14.74% | NA | |
| San Diego, CA | Employment (000): December | | 1,122.9 | 1,139.0 | 10.69% | 121.79 | 1,260.8 |
| San Jose, CA | Population (000)- July | 1,620.4 | 1,641.2 | 1,662.3 | 5.32% | 88.50 | 1,750.8 |
| San Jose, CA | Personal income in M$87 | | | | 11.42% | 0.00 | |
| San Jose, CA | Employment (000): December | | 965.5 | 975.8 | 8.04% | 78.50 | 1,054.3 |
| Seattle-Bellevue-Everett, WA | Population (000)- July | 3,378.5 | 3,424.4 | 3,470.9 | 8.16% | 283.19 | 3,754.1 |
| Seattle-Bellevue-Everett, WA | Personal income in M$87 | | | | 13.49% | NA | |
| Seattle-Bellevue-Everett, WA | Employment (000): December | | 1,377.7 | 1,409.6 | 9.75% | 137.39 | 1,547.0 |
| Washington, DC-MD-VA-WV | Population (000)- July | 4,609.4 | 4,673.9 | 4,739.3 | 6.16% | 291.75 | 5,031.1 |
| Washington, DC-MD-VA-WV | Personal income in M$87 | | | | 11.37% | NA | |
| Washington, DC-MD-VA-WV | Employment (000): December | | 2,511.5 | 2,676.2 | 7.44% | 199.18 | 2,875.4 |

Source: Estimates based on the forecasts by the Regional Economic Analysis Division, Bureau of Economic Analysis, United States Department of Commerce

## Table B1- Office Market Data in 1997

| Market | Population | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| Atlanta, Georgia | 3,614,835 | 66,548,080 | 5,504,896 | 8.3 | 4,780,470 | NA |
| Austin, Texas | 1,066,796 | 21,694,525 | 1,504,935 | 6.9 | 700,000 | 1,252,388 |
| Baltimore, Maryland | 2,481,499 | 39,205,030 | 4,885,312 | 12.5 | 679,949 | 1,308,076 |
| Baton Rouge, Louisiana | 571,387 | 3,460,851 | 170,196 | 4.9 | 115,000 | 71,855 |
| Birmingham, Alabama | 901,156 | 16,433,620 | 1,079,371 | 6.6 | 449,000 | 422,379 |
| Boise, Idaho | 381,882 | 9,854,900 | 486,755 | 4.9 | 155,000 | 170,256 |
| Boston, Massachusetts | 5,816,826 | 101,623,346 | 4,515,263 | 4.4 | 2,450,300 | 1,841,332 |
| Buffalo, New York | 1,170,646 | 7,853,073 | 1,165,903 | 14.8 | 454,000 | 191,496 |
| Charleston, South Carolina | 491,706 | 3,635,257 | 349,200 | 9.6 | 0 | 238,471 |
| Charlotte, North Carolina | 1,341,841 | 22,618,338 | 1,432,874 | 6.3 | 2,194,700 | 1,769,867 |
| Chicago, Illinois | 7,769,033 | 108,519,850 | 11,229,925 | 10.3 | 0 | 3,104,238 |
| Cincinnati, Ohio | 1,604,320 | 70,636,658 | 2,508,150 | 3.6 | 600,000 | 336,046 |
| Cleveland, Ohio | 2,235,652 | 36,130,841 | 4,716,032 | 13.1 | 194,000 | 830,931 |
| Colorado Springs, Colorado | 481,958 | 16,168,397 | 1,398,586 | 8.7 | 660,250 | 637,886 |
| Columbia, South Carolina | 493,301 | 9,955,000 | 1,199,550 | 12.0 | 225,000 | 42,900 |
| Columbus, Ohio | 1,457,780 | 28,676,079 | 963,235 | 3.4 | 1,375,000 | 1,998,006 |
| Dallas, Texas | 3,085,514 | 117,088,605 | 17,521,014 | 15.0 | 5,256,678 | 2,983,303 |
| Dayton, Ohio | 949,440 | 11,631,924 | 1,585,696 | 13.6 | 0 | 153,675 |
| Denver, Colorado | 1,894,898 | 61,463,400 | 7,070,900 | 11.5 | 2,603,800 | 722,100 |
| Des Moines, Iowa | 431,273 | 8,493,815 | 901,954 | 10.6 | 150,000 | -256,077 |
| Detroit, Michigan | 4,322,984 | 59,211,561 | 4,722,576 | 8.0 | NA | 2,402,676 |
| El Paso, Texas | 694,721 | 6,585,566 | 774,351 | 11.8 | NA | 134,000 |
| Fargo, North Dakota | 166,593 | 2,876,955 | 124,716 | 4.3 | 418,539 | 70,625 |
| Fort Lauderdale, Florida | 1,459,739 | 14,669,074 | 1,306,958 | 8.9 | 225,793 | 912,257 |
| Fort Wayne, Indiana | 477,548 | 5,426,800 | 387,419 | 7.1 | 0 | 223,280 |
| Fort Worth, Texas | 1,546,463 | 18,311,823 | 2,114,405 | 11.5 | 75,000 | 314,849 |
| Fresno, California | 674,853 | 12,771,400 | 1,189,000 | 9.3 | 41,000 | 310,300 |
| Gainesville, Florida | 197,878 | 2,115,900 | 100,000 | 4.7 | 46,000 | 185,400 |
| Grand Rapids, Michigan | 1,024,228 | 9,262,900 | 478,780 | 5.2 | 435,000 | 600,220 |
| Greensboro, North Carolina | 1,152,446 | 13,407,874 | 1,455,093 | 10.9 | 500,677 | 610,248 |
| Greenville, South Carolina | 904,875 | 4,497,143 | 542,322 | 12.1 | 251,000 | 359,127 |
| Harrisburg, Pennsylvania | 616,763 | 34,550,000 | 908,000 | 2.6 | 470,000 | 1,411,500 |
| Hartford, Connecticut | 1,109,412 | 22,324,534 | 4,899,967 | 21.9 | 0 | NA |
| Houston, Texas | 3,841,230 | 108,069,222 | 10,371,990 | 9.6 | 289,663 | 6,500,452 |
| Indianapolis, Indiana | 1,504,961 | 18,836,055 | 2,212,251 | 11.7 | 832,000 | -361,318 |
| Jackson, Mississippi | 424,152 | 16,863,000 | 867,000 | 5.1 | 420,000 | 121,000 |
| Jacksonville, Florida | 1,021,984 | 20,063,108 | 1,379,700 | 6.9 | 874,540 | 221,990 |
| Kansas City, Missouri | 1,703,149 | 32,590,057 | 2,386,636 | 7.3 | 540,000 | 661,059 |
| Knoxville, Tennessee | 656,549 | 9,715,000 | 950,350 | 9.8 | 0 | 134,650 |
| Las Vegas, Nevada | 1,244,232 | 11,733,085 | 1,198,702 | 10.2 | 939,609 | 1,259,306 |
| Little Rock, Arkansas | 552,830 | 10,266,894 | 1,043,184 | 10.2 | 75,000 | 125,708 |
| Los Angeles, California | 9,184,770 | NA | NA | N | NA | NA |
| Los Angeles-Central, California | NA | 29,431,111 | 5,841,082 | 19.8 | 0 | 979,918 |
| Los Angeles-East, California | NA | 2,700,000 | 324,000 | 12.0 | 0 | 81,000 |
| Los Angeles-Orange, California | 2,672,457 | 54,211,767 | 5,819,397 | 10.7 | 0 | 1,592,542 |
| Los Angeles-San Fernando Valley, CA | NA | 31,039,859 | 3,724,783 | 12.0 | 520,000 | 313,798 |
| Los Angeles-South Bay, California | NA | 29,707,106 | 6,491,494 | 21.9 | 0 | 1,278,259 |
| Los Angeles-West, California | NA | 57,000,000 | 6,000,000 | 10.5 | 1,500,000 | NA |
| Louisville, Kentucky | 996,430 | 14,026,000 | 1,995,000 | 14.2 | 270,000 | 140,000 |
| Melbourne, Florida | 459,322 | 4,132,141 | 602,493 | 14.6 | 30,800 | 320,126 |
| Memphis, Tennessee | 1,086,723 | 20,362,247 | 1,443,036 | 7.1 | 811,278 | 37,885 |
| Miami, Florida | 2,092,559 | 27,726,336 | 2,855,022 | 10.3 | 630,000 | 1,058,227 |
| Milwaukee, Wisconsin | 1,459,626 | 25,352,584 | 2,782,116 | 11.0 | NA | 627,228 |
| Minneapolis, Minnesota | 2,792,016 | 47,013,985 | 3,088,199 | 6.6 | 508,000 | 1,770,603 |
| Mobile, Alabama | 523,294 | 3,150,000 | 417,000 | 13.2 | 0 | 161,000 |
| Nashville, Tennessee | 1,134,052 | 14,627,975 | 765,817 | 5.2 | 1,157,353 | 677,302 |
| New Haven, Connecticut | 1,630,094 | 12,100,000 | 2,605,000 | 21.5 | 0 | 360,000 |
| New Jersey-Central, NJ | NA | 52,421,000 | 5,370,000 | 10.2 | 650,000 | 1,679,000 |
| Middlesex-Somerset-Hunterdon, NJ | 1,099,498 | NA | NA | N | NA | NA |
| New Jersey-Northern, NJ | NA | 86,468,779 | 11,244,230 | 13.0 | 584,047 | 6,286,899 |

## Table B1- Office Market Data in 1997

| Market | Population | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| Bergen-Passaic, New Jersey | 1,315,121 | NA | NA | N | NA | NA |
| Jersey City, New Jersey | 550,443 | NA | NA | N | NA | NA |
| Newark, New Jersey | 1,942,958 | NA | NA | N | NA | NA |
| New Jersey-Southern, NJ | NA | 14,580,000 | 2,408,105 | 16.5 | 876,000 | 602,846 |
| Trenton, New Jersey | 330,689 | NA | NA | N | NA | NA |
| New Orleans, Louisiana | 1,315,038 | 17,982,442 | 3,113,731 | 17.3 | NA | 188,544 |
| New York-Brooklyn/Queens, NY | NA | 67,562,798 | 6,738,420 | 10.0 | NA | NA |
| New York-Long Island, New York | 2,663,455 | 37,593,000 | 4,749,000 | 12.6 | NA | 1,368,000 |
| New York - Manhattan, New York | NA | 335,402,000 | 35,410,000 | 10.6 | 1,600,000 | 9,297,000 |
| New York, New York | 8,647,379 | NA | NA | N | NA | NA |
| Norfolk, Virginia | 1,549,885 | 15,397,077 | 1,415,803 | 9.2 | 0 | 623,958 |
| Oakland, California | 2,229,178 | 26,220,820 | 3,727,148 | 14.2 | 0 | -475,960 |
| Oklahoma City, Oklahoma | 1,034,215 | 13,840,513 | 2,095,734 | 15.1 | NA | -198,595 |
| Omaha, Nebraska | 686,706 | 14,428,331 | 949,796 | 6.6 | 125,000 | 1,063,089 |
| Orlando, Florida | 1,438,297 | 23,644,669 | 1,301,489 | 5.5 | 635,000 | 1,156,536 |
| Philadelphia, Pennsylvania | 4,951,563 | 84,444,532 | 9,269,752 | 11.0 | 1,107,300 | 3,413,338 |
| Phoenix, Arizona | 2,815,051 | 23,015,924 | 1,739,781 | 7.6 | 946,270 | 189,742 |
| Pittsburgh, Pennsylvania | 2,371,021 | 31,829,687 | 3,525,656 | 11.1 | NA | 454,842 |
| Portland, Maine | 252,300 | 6,500,000 | 390,000 | 6.0 | NA | 46,000 |
| Portland, Oregon | 1,787,220 | 17,476,581 | 1,121,089 | 6.4 | 1,107,793 | 550,685 |
| Raleigh, North Carolina | 1,046,524 | 21,550,963 | 1,543,355 | 7.2 | 1,139,267 | 616,253 |
| Reno, Nevada | 304,341 | 3,882,000 | 218,000 | 5.6 | 110,000 | 143,000 |
| Richmond, Virginia | 942,716 | 18,857,762 | 1,551,442 | 8.2 | 480,000 | 796,089 |
| Rochester, New York | 1,087,973 | 11,505,275 | 1,268,842 | 11.0 | NA | 849,644 |
| Sacramento, California | 1,502,067 | 26,281,850 | 2,343,542 | 8.9 | 988,703 | 343,496 |
| Saint Louis, Missouri | 2,553,415 | 34,046,642 | 3,181,563 | 9.3 | 649,000 | 1,568,401 |
| Salt Lake City, Utah | 1,234,855 | 17,600,000 | 460,000 | 2.6 | 800,000 | 840,000 |
| San Antonio, Texas | 1,511,534 | 16,311,559 | 1,481,419 | 9.1 | 0 | 782,391 |
| San Diego, California | 2,661,471 | 59,467,500 | 5,513,078 | 9.3 | 240,000 | 1,377,557 |
| San Francisco, California | 1,666,748 | 51,533,573 | 3,429,681 | 6.7 | 567,122 | 1,719,748 |
| San Jose, California | 1,618,410 | 15,517,215 | 692,347 | 4.5 | 568,000 | 243,017 |
| Santa Rosa, California | 425,653 | 4,337,114 | 364,317 | 8.4 | 0 | 106,677 |
| Seattle, Washington | 2,256,224 | 28,801,904 | 1,994,297 | 6.9 | 300,000 | 1,401,643 |
| Sioux City, Iowa | 121,758 | 1,353,031 | 39,226 | 2.9 | 210,000 | 142,808 |
| Sioux Falls, South Dakota | 158,626 | 1,771,850 | 239,428 | 13.5 | 33,450 | 39,034 |
| Springfield, Massachusetts | 576,250 | 3,400,000 | 265,000 | 7.8 | NA | 70,000 |
| Syracuse, New York | 743,820 | 9,211,000 | 1,667,000 | 18.1 | 0 | 138,000 |
| Tampa, Florida | 2,214,134 | 21,136,786 | 1,834,102 | 8.7 | NA | 728,757 |
| Toledo, Ohio | 610,953 | 6,500,484 | 1,283,351 | 19.7 | NA | -146,462 |
| Tulsa, Oklahoma | 761,488 | 14,248,759 | 1,555,949 | 10.9 | 0 | 887,345 |
| Washington, D.C. | 4,602,195 | 243,790,671 | 18,013,569 | 7.4 | 2,783,463 | NA |
| Washington, D.C. - Northern Virginia | NA | 106,513,413 | 4,918,785 | 4.6 | 1,041,169 | 1,053,042 |
| Washington, D.C. - Suburban Maryland | NA | 60,849,863 | 5,293,938 | 8.7 | 164,869 | 1,658,887 |

Source: SIOR

# Table B2- Office Market Data in 1998

| Market | Populatio | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| United States | 270,298,524 | 3,491,274 | 305,624 | 8.8 | 119,764 | 111,526 |
| Bristol, VA | 99,226 | 710 | 65 | 9.2 | 22 | NA |
| Buffalo, NY | 1,152,541 | 8,286 | 961 | 11.6 | 278 | 638 |
| Charleston, SC | 541,159 | 3,728 | 314 | 8.4 | 250 | 193 |
| Chicago, IL | 7,939,351 | 148,604 | 17,517 | 11.8 | 2,814 | 3,848 |
| Cincinnati, OH | 1,617,836 | 32,284 | 2,832 | 8.8 | 520 | 4,542 |
| Cleveland, OH | 2,222,731 | 36,144 | 4,396 | 12.2 | 650 | 1,491 |
| Columbia, SC | 512,316 | 9,955 | 839 | 8.4 | 305 | 360 |
| Dallas, TX | 3,209,886 | 134,864 | 17,629 | 13.1 | 12,171 | 7,007 |
| Dayton, OH | 948,522 | 12,103 | 194 | 16 | 18 | 147 |
| Denver, CO | 1,938,642 | 63,708 | 6,476 | 10.2 | 22 | 5,213 |
| Des Moines, IA | 436,922 | 9,228 | 884 | 9.6 | 88 | 168 |
| El Paso, TX | 703,127 | 685 | 864 | 12.6 | 120 | 175 |
| Fort Lauderdale, FL | 1,503,407 | 15,293 | 1,596 | 10.4 | 1,258 | 1,219 |
| Fort Worth, TX | 1,592,577 | 18,433 | 2,195 | 11.9 | 365 | 41 |
| Fresno, CA | 870,478 | 13,168 | 1,437 | 10.9 | 156 | 353 |
| Grand Rapids, MI | 1,037,933 | 1,019 | 959 | 9.4 | 415 | 447 |
| Greensboro, NC | 1,167,629 | 14,181 | 1,859 | 13.1 | 423 | 369 |
| Greenville, SC | 918,351 | 5,014 | 585 | 11.7 | 325 | 474 |
| Hartford, CT | 1,143,859 | 20,689 | 4,261 | 20.6 | - | NA |
| Indianapolis, IN | 1,519,194 | 19,759 | 2,318 | 11.7 | 791 | 600 |
| Jacksonville, FL | 1,044,684 | 22,669 | 2,291 | 10.1 | 176 | 1,695 |
| Knoxville, TN | 659,074 | 9,715 | 870 | 9 | 170 | 80 |
| Las Vegas, NV | 1,321,546 | 13,936 | 1,625 | 11.7 | 950 | 1,777 |
| Little Rock, AR | 556,295 | 1,038 | 918 | 8.8 | 240 | 238 |
| Los Angeles-Central, CA | N | 27,836 | 512 | 18.4 | NA | -380 |
| Los Angeles-East, CA | N | 274 | 247 | 9 | 40 | 117 |
| Los Angeles-Inland Empire, CA | N | 6,241 | 1,131 | 18.1 | 117 | 90 |
| Los Angeles-Orange County, CA | 2,721,701 | 5,381 | 4,611 | 8.6 | 1,201 | 3,167 |
| Los Angeles-San Fernando, CA | N | 31,601 | 3,792 | 12 | 600 | 494 |
| Los Angeles-San Gabriel, CA | N | 12,267 | 184 | 15 | NA | 1,195 |
| Los Angeles-South Bay, CA | N | 29,707 | 5,494 | 18.5 | 377 | 997 |
| Los Angeles-West, CA | N | 46,829 | 3,893 | 8.3 | 951 | 1,753 |
| Louisville, KY | 999,267 | 14,196 | 1,841 | 13 | 450 | 424 |
| Melbourne, FL | 466,093 | 4,211 | 592 | 14.1 | 44 | 89 |
| Miami, FL | 2,152,437 | 28,729 | 2,758 | 9.6 | 1,296 | 973 |
| Milwaukee, WI | 1,459,805 | 25,577 | 2,555 | 10 | 165 | 451 |
| Mobile, AL | 532,257 | 3,363 | 450 | 13.4 | 46 | 180 |
| Nashua, NH | 182,482 | 1,891 | 229 | 12.1 | 106 | -58 |
| New Haven, CT | N | 125 | 206 | 16.5 | 290 | 300 |
| New Jersey-Central, NJ | N | 62,469 | 6,924 | 11.1 | 4,301 | 3,193 |
| New Jersey-Northern, NJ | N | 63,887 | 11,466 | 17.9 | 2,086 | 3,691 |
| New Jersey-Southern, NJ | N | 15,606 | 1,618 | 10.4 | 571 | 1,817 |
| New Orleans, LA | 1,309,445 | 17,822 | 2,814 | 15.8 | NA | 140 |
| New York-Long Island, NY | N | 37,355 | 3,298 | 8.8 | 720 | 1,213 |
| Oakland, CA | 2,318,522 | 1,519 | 3,209 | 21.1 | 275 | NA |
| Oklahoma City, OK | 1,038,999 | 14,025 | 2,324 | 16.6 | NA | -43 |
| Philadelphia, PA | 4,946,562 | 85,517 | 7,542 | 8.8 | 1,112 | 1,892 |
| Pittsburgh, PA | 2,346,153 | 33,602 | 4,107 | 12.2 | 241 | -634 |
| Providence, RI | 574,038 | 914 | 946 | 10.4 | 45 | 656 |
| Richmond, VA | 957,032 | 19,349 | 1,645 | 8.5 | 242 | 398 |
| Roanoke, VA | 227,828 | 2,797 | 333 | 11.9 | 39 | 51 |
| Rochester, NY | 1,081,883 | 13,443 | 149 | 11.1 | 477 | 301 |
| Sacramento, CA | 1,531,963 | 26,877 | 222 | 8.3 | 2,701 | 719 |
| Saint Louis, MO | 2,563,801 | 35,913 | 3,392 | 9.4 | 1,356 | 1,656 |
| San Antonio, TX | 1,538,338 | 16,833 | 1,956 | 11.6 | 446 | 47 |
| Shreveport, LA | 378,641 | 3 621 | 879 | 24.3 | NA | 27 |
| Sonoma, CA | 433,304 | 4,736 | 509 | 10.7 | 91 | 254 |
| South Bend, IN | 258,088 | 2,916 | 252 | 8.6 | 140 | 237 |

## Table B2- Office Market Data in 1998

| Market | Populatio | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| Syracuse, NY | 73,464 | 9,211 | 1,427 | 15.5 | - | 249 |
| Tampa, FL | 2,256,559 | 22,161 | 2,048 | 9.2 | 1,078 | 810 |
| Toledo, OH | 609,935 | 6,674 | 1,265 | 18.9 | 107 | 131 |
| Tucson, AZ | 790,755 | 635 | 614 | 9.7 | 197 | -108 |
| Tulsa, OK | 776,906 | 14,929 | 1,283 | 8.6 | - | 954 |
| Ventura/Oxnard, CA | 731,967 | 9,375 | 1,225 | 13.1 | 200 | 260 |
| West Palm Beach, FL | 1,032,625 | 8,946 | 102 | 11.4 | 340 | 859 |
| Wichita, KS | 544,343 | 6,001 | 997 | 16.6 | NA | 24 |
| Wilmington, DE | 565,329 | 11,002 | 1,103 | 10 | 113 | 407 |
| Youngstown, OH | 591,752 | 25 | 315 | 12.6 | 25 | -5 |

Source: SIOR

## Table B3- Office Market Data in 1999

| Market | Population | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| Atlanta, Georgia | 3,824,281 | 107,334,845 | 12,189,642 | 11.4 | 6,062,138 | 5,3[illegible]5 |
| Austin, Texas | 1,132,817 | 22,798,408 | 1,496,567 | 6.6 | 1,649,807 | 322,199 |
| Baltimore, Maryland | 2,490,590 | 39,538,941 | 3,855,645 | 9.8 | 1,445,276 | 2,531,869 |
| Baton Rouge, Louisiana | 578,445 | 3,490,851 | 205,615 | 5.9 | 30,000 | -5,670 |
| Birmingham, Alabama | 913,565 | 20,096,000 | 2,002,900 | 10.0 | 62,000 | 132,900 |
| Boise, Idaho | 405,007 | 5,928,251 | 683,416 | 11.5 | 282,955 | 989,121 |
| Boston, Massachusetts | 5,894,873 | 114,310,208 | 8,080,418 | 7.1 | 12,588,621 | 3,507,543 |
| Buffalo, New York | 1,146,556 | 8,564,103 | 1,230,691 | 14.4 | 208,000 | 8,733 |
| Charleston, South Carolina | 544,103 | 3,916,147 | 344,105 | 8.8 | 385,000 | 148,832 |
| Charlotte, North Carolina | 1,405,961 | 27,729,534 | 2,446,869 | 8.8 | 4,400,000 | 1,881,674 |
| Chicago, Illinois | 7,980,055 | 148,717,159 | 17,270,763 | 11.6 | 4,233,568 | -1,924,164 |
| Cincinnati, Ohio | 1,624,719 | 32,284,523 | 3,095,449 | 9.6 | 532,000 | 336,852 |
| Cleveland, Ohio | 2,219,856 | 36,379,263 | 3,899,974 | 10.7 | 899,116 | 731,318 |
| Colorado Springs, Colorado | 498,097 | 18,099,683 | 944,231 | 5.2 | 1,452,265 | 1,059,605 |
| Columbia, South Carolina | 517,411 | 10,470,000 | 863,100 | 8.2 | 515,000 | 491,300 |
| Columbus, Ohio | 1,478,498 | 31,312,248 | 1,421,974 | 4.5 | 2,090,000 | 748,770 |
| Dallas, Texas | 3,269,983 | 148,101,792 | 25,790,911 | 17.4 | 6,320,079 | 5,138,714 |
| Dayton, Ohio | 945,669 | 11,961,460 | 1,685,098 | 14.1 | NA | 264,120 |
| Denver, Colorado | 1,965,781 | 70,689,285 | 4,043,600 | 5.7 | 3,260,943 | 7,657,791 |
| Des Moines, Iowa | 440,560 | 9,228,384 | 852,418 | 9.2 | 15,000 | 31,436 |
| Detroit, Michigan | 4,483,071 | 74,776,132 | 3,414,877 | 4.6 | 805,000 | 2,706,376 |
| El Paso, Texas | 713,257 | 7,173,050 | 942,435 | 13.1 | NA | 243,799 |
| Fargo, North Dakota | 169,446 | 3,566,945 | 296,568 | 8.3 | 68,586 | 269,280 |
| Fort Lauderdale, Florida | 1,498,581 | 31,285,051 | 2,080,747 | 6.7 | 777,369 | 1,083,830 |
| Fort Wayne, Indiana | 483,652 | 5,548,800 | 400,648 | 7.2 | 68,000 | 23,605 |
| Fort Worth, Texas | 1,618,343 | 18,571,717 | 2,354,713 | 12.7 | 393,233 | 77,598 |
| Fresno, California | 888,903 | 14,051,300 | 1,628,800 | 11.6 | 303,000 | 691,300 |
| Gainesville, Florida | 206,306 | 2,285,364 | 74,000 | 3.2 | 227,685 | 134,764 |
| Grand Rapids, Michigan | 1,045,268 | 10,604,800 | 977,358 | 9.2 | 320,000 | 396,377 |
| Greensboro, North Carolina | 1,178,495 | 14,351,206 | 1,938,789 | 13.5 | 564,824 | 90,700 |
| Greenville, South Carolina | 926,654 | 5,984,663 | 1,058,372 | 17.7 | 347,000 | 497,481 |
| Harrisburg, Pennsylvania | 617,166 | 35,630,000 | 1,300,000 | 3.6 | 240,000 | -129,000 |
| Hartford, Connecticut | 1,109,946 | 21,767,484 | 4,159,817 | 19.1 | "-" | 1,179,466 |
| Houston, Texas | 3,991,691 | 107,620,268 | 9,231,204 | 8.6 | 5,360,403 | 2,758,462 |
| Indianapolis, Indiana | 1,530,570 | 21,505,930 | 2,049,481 | 9.5 | 307,544 | 1,261,138 |
| Jackson, Mississippi | 156,597 | 17,632,000 | 755,000 | 4.3 | 220,000 | -90,000 |
| Jacksonville, Florida | 1,058,981 | 15,004,818 | 1,521,528 | 10.1 | 1,170,261 | 1,437,978 |
| Kansas City, Missouri | 1,751,214 | 47,363,705 | 2,760,154 | 5.8 | 2,420,154 | 2,956,464 |
| Knoxville, Tennessee | 663,880 | 6,885,633 | 886,797 | 12.9 | 93,887 | 415,645 |
| Las Vegas, Nevada | 1,367,114 | 15,561,648 | 1,877,753 | 12.1 | 1,092,214 | 1,132,431 |
| Little Rock, Arkansas | 560,035 | 10,539,650 | 818,875 | 7.8 | 347,000 | 259,031 |
| Los Angeles, California | 9,377,938 | NA | NA | NA | NA | NA |
| Los Angeles-Central, California | NA | 27,378,107 | 5,241,515 | 19.1 | NA | 785,358 |
| Los Angeles-East, California | NA | 1,840,000 | 147,200 | 8.0 | 60,000 | 18,400 |
| Los Angeles-Orange County, CA | 2,735,375 | 54,377,716 | 4,192,854 | 7.7 | 3,057,600 | -272,063 |
| Los Angeles-San Fernando Valley, CA | NA | 32,075,859 | 3,464,192 | 10.8 | 425,000 | 802,911 |
| Los Angeles-South Bay, California | NA | 29,898,138 | 4,519,621 | 15.1 | 81,870 | 1,096,753 |
| Los Angeles-West, California | NA | 40,426,500 | 3,319,100 | 8.2 | 650,000 | 796,749 |
| Louisville, Kentucky | 1,003,148 | 14,636,000 | 1,840,000 | 12.6 | 225,000 | 341,000 |
| Melbourne, Florida | 470,027 | 4,397,203 | 592,321 | 13.5 | 60,000 | 186,080 |
| Memphis, Tennessee | 1,100,230 | 17,373,697 | 1,313,131 | 7.6 | 2,240,000 | NA |
| Miami, Florida | 2,131,916 | 30,625,934 | 3,154,858 | 10.3 | 1,429,439 | 1,174,714 |
| Milwaukee, Wisconsin | 1,458,453 | 25,900,000 | 2,630,000 | 10.2 | 550,000 | 245,000 |
| Minneapolis, Minnesota | 2,856,786 | 49,314,949 | 4,028,268 | 8.2 | 4,887,500 | 202,315 |
| Mobile, Alabama | 536,301 | 3,577,328 | 527,216 | 14.7 | 90,000 | 106,872 |
| Nashville, Tennessee | 1,171,096 | 20,620,169 | 2,101,729 | 10.2 | 1,890,770 | -1,842,317 |
| New Haven, Connecticut | 1,633,739 | 13,900,000 | 2,115,000 | 15.2 | 390,000 | 360,000 |
| New Jersey-Central, NJ | NA | 66,644,516 | 7,162,699 | 10.7 | 1,595,290 | 3,937,343 |
| Middlesex-Somerset-Hunterdon, NJ | 1,131,905 | NA | NA | NA | NA | NA |
| New Jersey-Northern, NJ | NA | 71,724,450 | 10,998,274 | 15.3 | 3,845,430 | 8,304,398 |
| Bergen-Passaic, New Jersey | 1,349,797 | NA | NA | NA | NA | NA |

## Table B3- Office Market Data in 1999

| Market | Population | Inventory | Vacant Space | Vacancy Rate | Construction | Absorption |
|---|---|---|---|---|---|---|
| Jersey City, New Jersey | 558,499 | NA | NA | NA | NA | NA |
| Newark, New Jersey | 1,956,546 | NA | NA | NA | NA | NA |
| New Jersey-Southern, NJ | NA | 16,177,000 | 1,575,094 | 9.7 | NA | 4,810,437 |
| Trenton, New Jersey | 332,203 | NA | NA | NA | NA | NA |
| New Orleans, Louisiana | 1,310,213 | NA | NA | NA | NA | NA |
| New York-Brooklyn/Queens, NY | NA | 68,576,000 | 3,300,000 | 4.8 | NA | 2,200,000 |
| New York-Long Island, New York | 2,680,413 | 37,819,718 | 2,651,522 | 7.0 | 1,122,000 | 1,111,098 |
| New York - Manhattan, New York | NA | 340,010,000 | 24,060,000 | 7.1 | 3,293,000 | 4,234,000 |
| New York, New York | 8,718,045 | NA | NA | NA | NA | NA |
| Norfolk, Virginia | 1,547,085 | 18,828,964 | 1,291,365 | 6.9 | 129,000 | 537,237 |
| Oakland, California | 2,322,512 | 24,070,710 | 1,538,132 | 6.4 | 550,000 | NA |
| Oklahoma City, Oklahoma | 1,045,728 | NA | NA | NA | NA | NA |
| Omaha, Nebraska | 699,385 | 8,806,000 | 534,980 | 6.1 | 805,000 | 285,360 |
| Orlando, Florida | 1,531,635 | 21,397,000 | 2,294,000 | 10.7 | 2,421,000 | 1,928,000 |
| Philadelphia, Pennsylvania | 4,946,435 | 87,727,781 | 9,152,532 | 10.4 | 777,459 | 1,597,279 |
| Phoenix, Arizona | 2,994,922 | 27,494,379 | 2,515,692 | 9.1 | 2,182,226 | 936,197 |
| Pittsburgh, Pennsylvania | 2,336,230 | 34,077,522 | 4,111,429 | 12.1 | 755,000 | -264,779 |
| Portland, Maine | 255,078 | 6,557,000 | 253,000 | 3.9 | 85,000 | 50,000 |
| Portland, Oregon | 1,843,362 | 17,563,381 | 1,326,678 | 7.6 | 1,229,978 | 683,390 |
| Raleigh, North Carolina | 1,101,410 | 24,747,942 | 1,766,436 | 7.1 | 2,194,495 | 1,791,725 |
| Reno, Nevada | 319,386 | 4,560,000 | 515,000 | 11.3 | 50,000 | 217,000 |
| Richmond, Virginia | 964,695 | 20,065,431 | 1,842,131 | 9.2 | 630,000 | 519,172 |
| Rochester, New York | 1,081,365 | 14,042,540 | 1,748,737 | 12.5 | NA | 339,903 |
| Sacramento, California | 1,535,958 | 29,080,025 | 2,426,871 | 8.3 | 2,303,750 | 1,785,778 |
| Saint Louis, Missouri | 2,568,578 | 38,561,801 | 3,987,369 | 10.3 | 1,281,318 | 2,053,521 |
| Salt Lake City, Utah | 1,281,817 | NA | NA | NA | NA | NA |
| San Antonio, Texas | 1,559,558 | 17,260,981 | 2,109,483 | 12.2 | 680,000 | 274,493 |
| San Diego, California | 2,798,201 | 61,767,810 | 4,614,249 | 7.5 | 2,370,232 | 2,589,188 |
| San Francisco, California | 1,717,639 | 53,764,322 | 1,948,438 | 3.6 | 1,547,322 | 2,571,730 |
| San Jose, California | 1,671,121 | 17,506,670 | 995,391 | 5.7 | 989,993 | 2,715,907 |
| Santa Rosa, California | 436,792 | NA | NA | NA | NA | NA |
| Seattle, Washington | 2,330,597 | 26,164,250 | 665,090 | 2.5 | 2,889,825 | 1,671,088 |
| Sioux City, Iowa | 120,505 | 1,717,888 | 72,821 | 4.2 | "-" | 220,949 |
| Sioux Falls, South Dakota | 165,275 | 1,910,900 | 176,784 | 9.3 | 213,600 | 101,975 |
| Springfield, Massachusetts | 575,299 | 4,427,000 | 455,000 | 10.3 | 50,000 | 97,000 |
| Syracuse, New York | 732,039 | 9,360,555 | 1,269,828 | 13.6 | "-" | 156,828 |
| Tampa, Florida | 2,281,537 | 23,054,387 | 1,864,472 | 8.1 | 1,274,525 | 1,077,172 |
| Toledo, Ohio | 609,243 | 6,928,184 | 1,294,874 | 18.7 | 213,260 | 196,264 |
| Tulsa, Oklahoma | 783,728 | 15,129,394 | 2,102,206 | 13.9 | 884,000 | -619,343 |
| Washington, D.C | 4,714,675 | 88,811,115 | 3,942,847 | 4.4 | 4,346,326 | 2,096,863 |
| Washington, D.C. - Northern Virginia | NA | 116,771,150 | 3,900,880 | 3.3 | 10,165,342 | 6,809,927 |
| Washington, D.C. - Suburban Maryland | NA | 65,942,072 | 4,807,274 | 7.3 | 2,845,221 | 1,130,547 |

Source: SIOR

## Table C1- Industrial Buildings Market Overview by Metropolitan Area, 1999

| Market | Population | Inventory | Vacant Space | Vac. Rate | Construction | Absorption | Abs/ (constr+vac.) |
|---|---|---|---|---|---|---|---|
| Atlanta, Georgia | 3,824,281 | 348,360,870 | 30,153,775 | 8.7 | 7,223,673 | 12,874,043 | 34.4% |
| Austin, Texas | 1,132,817 | 23,245,725 | 1,649,839 | 7.1 | 1,800,967 | 2,097,870 | 60.8% |
| Baltimore, Maryland | 2,490,590 | 150,033,321 | 16,205 288 | 10.8 | 3,178,033 | 2,018,993 | 10.4% |
| Baton Rouge, Louisiana | 578,445 | 16,376,000 | 650,000 | 4.0 | 275,650 | 166,000 | 17.9% |
| Bergen-Passaic, New Jersey | 1,349,797 | NA | NA | NA | NA | NA | NA |
| Birmingham, Alabama | 913,565 | 86,515,772 | 3,125,410 | 3.6 | 1,195,568 | 1,269,251 | 29.4% |
| Boise, Idaho | 405,007 | 19,469,577 | 798,124 | 4.1 | 459,605 | -728,547 | -57.9% |
| Boston, Massachusetts | 5,894,873 | 87,361,763 | 6,371,153 | 7.3 | 806,000 | 965,100 | 13.4% |
| Buffalo, New York | 1,146,556 | 98,887,433 | 9,432,676 | 9.5 | 425,000 | 115,330 | 1.2% |
| Charleston, South Carolina | 544,103 | 5,559,004 | 1,132,781 | 20.4 | 620,000 | 1,864,480 | 106.4% |
| Charlotte, North Carolina | 1,405,961 | 21,379,694 | 2,309,006 | 10.8 | 998,900 | 1,464,787 | 44.3% |
| Chicago, Illinois | 7,980,055 | 892,891,251 | 59,183,259 | 6.6 | 1,681,320 | 25,069,609 | 41.2% |
| Cincinnati, Ohio | 1,624,719 | 216,200,000 | 12,770,000 | 5.9 | 5,800,000 | 10,230,000 | 55.1% |
| Cleveland, Ohio | 2,219,856 | 310,967,000 | 22,481,100 | 7.2 | 956,900 | 1,211,900 | 5.2% |
| Colorado Springs, Colorado | 498,097 | 28,782,908 | 1,271,567 | 4.4 | 306,169 | 701,389 | 44.5% |
| Columbia, South Carolina | 517,411 | 25,663,127 | 1,734,000 | 6.8 | 1,448,000 | 1,251,000 | 39.3% |
| Columbus, Ohio | 1,478,498 | 151,000,000 | 10,500,000 | 7.0 | 3,400,000 | 350,000 | 2.5% |
| Dallas, Texas | 3,269,983 | 308,600,000 | 22,836,000 | 7.4 | 12,200,000 | 13,443,000 | 38.4% |
| Dayton, Ohio | 945,669 | 46,790,000 | 5,620,000 | 12.0 | 200,000 | -630,000 | -10.8% |
| Denver, Colorado | 1,965,781 | 142,656,876 | 8,883,482 | 6.2 | 3,900,664 | 3,141,530 | 24.6% |
| Des Moines, Iowa | 440,560 | 22,658,000 | 1,339,000 | 5.9 | 250,000 | 789,983 | 49.7% |
| Detroit, Michigan | 4,483,071 | 500,000,000 | 29,806,539 | 6.0 | 5,282,071 | NA | NA |
| El Paso, Texas | 713,257 | 48,568,185 | 3,524,729 | 7.3 | 2,193,981 | 2,503,038 | 43.8% |
| Fargo, North Dakota | 169,446 | 13,764,464 | 340,276 | 2.5 | 253,282 | 397,535 | 67.0% |
| Fort Lauderdale, Florida | 1,498,581 | NA | NA | NA | NA | NA | NA |
| Fort Wayne, Indiana | 483,652 | 35,315,000 | 4,774,118 | 13.5 | 472,500 | -19,118 | -0.4% |
| Fort Worth, Texas | 1,618,343 | 161,895,747 | 9,494,598 | 5.9 | 4,200,000 | 11,181,404 | 81.6% |
| Fresno, California | 888,903 | 42,154,145 | 632,288 | 1.5 | 584,000 | 1,807,283 | 148.6% |
| Gainesville, Florida | 206,306 | 2,681,500 | 55,000 | 2.1 | 80,600 | 481,500 | 355.1% |
| Grand Rapids, Michigan | 1,045,268 | 84,500,000 | 6,250,000 | 7.4 | 4,500,000 | 2,250,000 | 20.9% |
| Greensboro, North Carolina | 1,178,495 | 31,900,000 | 3,692,000 | 11.6 | 428,500 | 230,600 | 5.6% |
| Greenville, South Carolina | 926,654 | 66,000,000 | 1,400,000 | 2.1 | 300,000 | 580,000 | 34.1% |
| Harrisburg, Pennsylvania | 617,166 | 98,500,000 | 1,750,000 | 1.8 | 1,000,000 | 1,420,000 | 51.6% |
| Hartford, Connecticut | 1,109,946 | 62,231,739 | 7,760,021 | 12.5 | 300,000 | 2,032,275 | 25.2% |
| Houston, Texas | 3,991,691 | 245,830,287 | 17,130,723 | 7.0 | 2,742,861 | 7 807 617 | 39.3% |
| Indianapolis, Indiana | 1,530,570 | 189,218,000 | 12,852,000 | 6.8 | 1,887,775 | 5,629,700 | 38.2% |
| Jackson, Mississippi | 156,597 | 19,187,000 | 1,530,000 | 8.0 | 40,000 | -10 000 | -0.6% |
| Jacksonville, Florida | 1,058,981 | 78,490,000 | 2,980,000 | 3.8 | 1,790,000 | 1,885,000 | 39.5% |
| Jersey City, New Jersey | 558,499 | NA | NA | NA | NA | NA | NA |
| Kansas City, Missouri | 1,751,214 | 136,806,886 | 8,050,538 | 5.9 | 761,000 | 2,192,367 | 24.9% |
| Knoxville, Tennessee | 663,880 | 33,801,023 | 1,700,712 | 5.0 | NA | 187,013 | NA |
| Las Vegas, Nevada | 1,367,114 | NA | NA | NA | NA | NA | NA |
| Little Rock, Arkansas | 560,035 | 31,042,710 | 420,493 | 1.4 | NA | 884,808 | NA |
| Los Angeles, California | 9,377,938 | NA | NA | NA | NA | NA | NA |
| Los Angeles-Central, California | NA | 223,272,452 | 10,058,356 | 4.5 | 1,898,256 | 8,675,072 | 72.6% |
| Los Angeles-East, California | NA | 83,300,000 | 2,915,500 | 3.5 | 1,500,000 | 3,296,500 | 74.7% |
| Los Angeles-Orange County, CA | 2,735,375 | 228,362,449 | 12,550,794 | 5.5 | 2,259,159 | 6,754,962 | 45.6% |
| Los Angeles-San Fernando Valley, CA | NA | 184,398,861 | 10,572,262 | 5.7 | 2,226,107 | 717,961 | 5.6% |
| Los Angeles-South Bay, California | NA | 188,380,365 | 8,339,908 | 4.4 | 1,414,819 | 3,855,090 | 39.5% |
| Los Angeles-West, California | NA | 32,700,000 | 350,000 | 1.1 | NA | 200,000 | NA |
| Louisville, Kentucky | 1,003,148 | 31,400,000 | 1,700,000 | 5.4 | 1,510,000 | 1,876,500 | 58.5% |
| Melbourne, Florida | 470,027 | 7,100,000 | 400,000 | 5.6 | 400,000 | 400,000 | 50.0% |
| Memphis, Tennessee | 1,100,230 | 146,453,000 | 19,437,000 | 13.3 | 3,000,000 | 5,281,000 | 23.5% |
| Miami, Florida | 2,131,916 | 159,250,000 | 9,272,500 | 5.8 | 1,000,000 | 2,294,600 | 22.3% |
| Middlesex-Somerset-Hunterdon, NJ | 1,131,905 | NA | NA | NA | NA | NA | NA |
| Milwaukee, Wisconsin | 1,458,453 | 205,000,000 | 7,500,000 | 3.7 | 400,000 | 2,800,000 | 35.4% |
| Minneapolis, Minnesota | 2,856,786 | 292,816,545 | 13,540,459 | 4.6 | 4,850,000 | 6,414,486 | 34.9% |
| Mobile, Alabama | 536,301 | 13,630,000 | 196,000 | 1.4 | 100,000 | 935,000 | 315.9% |
| Nashville, Tennessee | 1,171,096 | 182,650,000 | 5,694,000 | 3.1 | 1,122,200 | 2,256,000 | 33.1% |
| New Haven, Connecticut | 1,633,739 | 39,515,000 | 883,000 | 2.2 | 155,000 | 548,500 | 52.8% |

## Table C1- Industrial Buildings Market Overview by Metropolitan Area, 1999

| Market | Population | Inventory | Vacant Space | Vac. Rate | Construction | Absorption | Abs/ (constr+vac.) |
|---|---|---|---|---|---|---|---|
| New Jersey-Central, NJ | NA | 325,235,000 | 23,898,000 | 7.3 | 2,924,034 | 7,429,195 | 27.7% |
| New Jersey-Southern, NJ | NA | 86,082,320 | 5,128,150 | 6.0 | 1,060,400 | 770,156 | 12.4% |
| New Orleans, Louisiana | 1,310,213 | 49,529,897 | 4,839,616 | 9.8 | 300,000 | -3,286,759 | -63.9% |
| New York - Manhattan, New York | NA | NA | 2,000,000 | NA | NA | NA | NA |
| New York, New York | 8,718,045 | NA | NA | NA | NA | NA | NA |
| New York-Brooklyn/Queens, NY | NA | 219,090,653 | 19,551,575 | 8.9 | NA | 3,956,285 | NA |
| New York-Long Island, New York | 2,680,413 | 131,157,458 | 13,558,981 | 10.3 | 1,800,000 | 3,811,485 | 24.8% |
| Newark, New Jersey | 1,956,546 | NA | NA | NA | NA | NA | NA |
| New Jersey-Northern, NJ | NA | 345,579,505 | 22,301,997 | 6.5 | 1,100,000 | 5,900,000 | 25.2% |
| Norfolk, Virginia | 1,547,085 | NA | NA | NA | NA | NA | NA |
| Oakland, California | 2,322,512 | 126,711,583 | 8,306,913 | 6.6 | 479,301 | 7,036,677 | 80.1% |
| Oklahoma City, Oklahoma | 1,045,728 | 76,000,000 | 2,400,000 | 3.2 | 2,000,000 | 4,100,000 | 93.2% |
| Omaha, Nebraska | 699,385 | 18,205,500 | 1,422,000 | 7.8 | 1,024,000 | 510,000 | 20.9% |
| Orlando, Florida | 1,531,635 | 78,161,375 | 5,471,296 | 7.0 | 1,881,421 | 4,061,657 | 55.2% |
| Philadelphia, Pennsylvania | 4,946,435 | 244,270,406 | 26,610,954 | 10.9 | 1,124,684 | 2,382,721 | 8.6% |
| Phoenix, Arizona | 2,994,922 | 212,961,000 | 19,715,000 | 9.3 | 6,342,000 | 9,395,000 | 36.1% |
| Pittsburgh, Pennsylvania | 2,336,230 | 132,000,000 | 14,000,000 | 10.6 | 1,000,000 | 7,000,000 | 46.7% |
| Portland, Maine | 255,078 | 9,530,000 | 140,000 | 1.5 | NA | 285,000 | NA |
| Portland, Oregon | 1,843,362 | 40,964,029 | 3,830,863 | 9.4 | 663,306 | 717,638 | 16.0% |
| Raleigh, North Carolina | 1,101,410 | 22,500,000 | 2,650,000 | 11.8 | 1,100,000 | 1,300,000 | 34.7% |
| Reno, Nevada | 319,386 | 48,631,104 | 4,377,808 | 9.0 | 1,270,704 | 3,876,963 | 68.6% |
| Richmond, Virginia | 964,695 | 29,569,124 | 4,464,526 | 15.1 | 1,414,735 | 3,313,474 | 56.4% |
| Rochester, New York | 1,081,365 | NA | NA | NA | NA | NA | NA |
| Sacramento, California | 1,535,958 | 125,000,000 | 8,000,000 | 6.4 | 3,000,000 | 12,000,000 | 109.1% |
| Saint Louis, Missouri | 2,568,578 | 211,050,000 | 6,326,000 | 3.0 | 1,450,000 | 3,489,000 | 44.9% |
| Salt Lake City, Utah | 1,281,817 | 91,032,099 | 7,357,688 | 8.1 | 1,623,468 | 1,700,169 | 18.9% |
| San Antonio, Texas | 1,559,558 | 68,367,970 | 5,018,283 | 7.3 | 673,617 | 7,239,217 | 127.2% |
| San Diego, California | 2,798,201 | 159,361,126 | 13,141,083 | 8.2 | 4,877,218 | 14,616,970 | 81.1% |
| San Francisco, California | 1,717,639 | NA | NA | NA | NA | NA | NA |
| San Jose, California | 1,671,121 | 78,947,492 | 4,386,476 | 5.6 | 388,978 | 2,817,432 | 59.0% |
| Santa Rosa, California | 436,792 | 20,233,864 | 1,228,243 | 6.1 | 500,000 | 479,332 | 27.7% |
| Seattle, Washington | 2,330,597 | 132,222,221 | 5,876,970 | 4.4 | 1,048,166 | 1,911,255 | 27.6% |
| Sioux City, Iowa | 120,505 | 8,225,000 | 200,000 | 2.4 | 100,000 | 250,000 | 83.3% |
| Sioux Falls, South Dakota | 165,275 | NA | NA | NA | NA | NA | NA |
| Springfield, Massachusetts | 575,299 | NA | NA | NA | NA | NA | NA |
| Syracuse, New York | 732,039 | 36,530,000 | 1,961,500 | 5.4 | NA | 425,500 | NA |
| Tampa, Florida | 2,281,537 | 65,687,004 | 4,606,309 | 7.0 | 476,322 | 989,052 | 19.5% |
| Toledo, Ohio | 609,243 | 78,684,221 | 5,657,073 | 7.2 | 1,800,000 | -2,507,875 | -33.6% |
| Trenton, New Jersey | 332,203 | NA | NA | NA | NA | NA | NA |
| Tulsa, Oklahoma | 783,728 | 55,500,000 | 2,291,729 | 4.1 | 350,000 | 976,765 | 37.0% |
| Washington, D.C. | 4,714,675 | NA | NA | NA | NA | NA | NA |
| Washington, D.C. - Northern Virginia | NA | 58,400,000 | 3,400,000 | 5.8 | 700,000 | 1,900,000 | 46.3% |
| Washington, D.C. - Suburban Maryland | NA | 71,655,164 | 7,231,727 | 10.1 | 1,533,460 | 1,657,581 | 18.9% |

## Table D1- Retail Commerce Data by Metropolitan Area - 1997

| | Population | GAFO | | | Estimated Supply and Demand in 1997 GLA per Capita | | |
|---|---|---|---|---|---|---|---|
| | 98-97 | 92 | 97 | % 97-92 | Real | Estimated according to demand | Supply less demand |
| Atlanta, GA MSA | 3.08% | 7,256,179 | 12,602,175 | 73.7% | 31.6 | 29.7 | **1.87** |
| Austin-San Marcos, TX MSA | 3.38% | 1,927,467 | NA | NA | 27.9 | 34.1 | **-6.19** |
| Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA | 0.71% | N | NA | NA | 11.9 | 20.4 | **-8.44** |
| Charlotte-Gastonia-Rock Hill, NC-SC MSA | 2.32% | 3,045,438 | 4,113,596 | 35.1% | 32.5 | 25.7 | **6.82** |
| Chicago-Gary-Kenosha, IL-IN-WI CMSA | 0.67% | 17,671,615 | NA | NA | 20.6 | 17.1 | **3.5** |
| Cincinnati-Hamilton, OH-KY-IN CMSA | 0.73% | 3,477,960 | NA | NA | 23.7 | 21.2 | **2.56** |
| Cleveland-Akron, OH CMSA | -0.11% | 6,183,586 | 7,639,236 | 23.5% | 20.3 | 13.8 | **6.52** |
| Columbus, OH MSA | 0.90% | 3,205,070 | 4,912,110 | 53.3% | 25.8 | 25.5 | **0.29** |
| Dall-Dallas TX PMSA | 2.78% | 9,752,337 | NA | NA | 32.5 | 29.4 | **3.13** |
| Dall-Fort Worth-Arlington TX PMSA | 2.43% | 9,752,337 | NA | NA | 32.8 | 28.8 | **3.99** |
| Denver-Boulder-Greeley, CO CMSA | 2.00% | 4,838,922 | 7,978,010 | 64.9% | 32.5 | 27.6 | **4.91** |
| Detroit-Ann Arbor-Flint, MI CMSA | 0.27% | 12,443,685 | 17,507,384 | 40.7% | 19.9 | 15.9 | **3.95** |
| Greensboro--Winston-Salem--High Point, NC MSA | 1.23% | 2,259,320 | 3,769,668 | 66.8% | 30.2 | 24.7 | **5.42** |
| Greenville-Spartanburg-Anderson, SC MSA | 1.29% | 1,587,873 | 2,586,576 | 62.9% | 29.1 | 23.8 | **5.37** |
| Houston-Galveston-Brazoria, TX CMSA | 2.16% | 8,483,571 | NA | NA | 28.4 | 27.8 | **0.59** |
| Indianapolis, IN MSA | 0.98% | 3,225,009 | 5,012,998 | 55.4% | 27.6 | 22.8 | **4.78** |
| Jacksonville, FL MSA | 1.54% | 1,984,966 | 2,912,664 | 46.7% | 33.3 | 26.3 | **7.04** |
| Kansas City, MO-KS MSA | 1.18% | 3,565,744 | 5,112,955 | 43.4% | 27.7 | 20.3 | **7.37** |
| Las Vegas, NV-AZ MSA | 4.68% | 2,233,754 | 4,304,043 | 92.7% | 36.0 | 36.3 | **-0.39** |
| LosA-Los Angeles-Long Beach CA PMSA | 1.06% | N | NA | NA | 17.3 | 17.5 | **-0.15** |
| LosA-Orange County, CA PMSA | 2.18% | 30,930,469 | 40,949,605 | 32.4% | 26.7 | 28.9 | **-2.16** |
| LosA-Riverside-San Bernardino, CA PMSA | 2.18% | 30,930,469 | 40,949,605 | 32.4% | 25.7 | 26.2 | **20.49** |
| Miami-Fort Lauderdale, FL PMSA | 2.07% | 8,814,843 | 12,693,163 | 44.0% | 41.4 | 39.5 | **1.85** |
| Miami-Miami, FL PMSA | 1.10% | 8,814,843 | 12,693,163 | 44.0% | 26.4 | 26.4 | **0.04** |
| Milwaukee-Racine, WI CMSA | 0.05% | 3,298,875 | 4,465,221 | 35.4% | 17.0 | 19.2 | **22.25** |
| Minneapolis-St Paul, MN-WI MSA | 1.30% | 6,123,153 | 9,284,444 | 51.6% | 20.5 | 26.0 | **25.49** |
| Nashville TN MSA | 1.73% | 2,406,207 | 4,007,335 | 66.5% | 32.4 | 29.2 | **3.25** |
| New Orleans LA MSA | 0.10% | 2,619,271 | 3,565,420 | 36.1% | 22.6 | 18.9 | **3.74** |
| NewY-Nassau-Suffolk, NY PMSA | 0.25% | N | NA | NA | 11.5 | 20.5 | **28.99** |
| NewY-New York, NY PMSA | 0.34% | 41,623,193 | NA | NA | 3.9 | 8.8 | **-4.94** |
| NewY-Newark, NJ PMSA | 0.26% | 41,623,193 | NA | NA | 11.0 | 14.8 | **23.78** |
| Norfolk-Virginia Beach-Newport News, VA-NC MSA | -0.17% | 2,824,684 | 4,076,747 | 44.3% | 22.3 | 23.0 | **20.67** |
| Oklahoma City, OK MSA | 0.76% | 2,124,328 | 3,107,521 | 46.3% | 29.4 | 22.3 | **7.13** |
| Orlando, FL MSA | 2.84% | 3,279,558 | 5,353,883 | 63.3% | 38.7 | 37.4 | **1.29** |
| Philadelphia PMSA | 0.14% | 12,024,639 | 16,234,712 | 35.0% | 15.9 | 18.1 | **22.24** |
| Phoenix-Mesa, AZ MSA | 3.13% | 4,787,170 | 8,650,321 | 80.7% | 34.6 | 31.2 | **3.33** |
| Pittsburgh, PA MSA | -0.58% | 4,580,064 | 6,138,024 | 34.0% | 16.5 | 14.9 | **1.59** |
| Portland-Salem, OR-WA CMSA | 1.63% | 4,949,967 | NA | NA | 22.4 | 27.4 | **25.07** |
| Raleigh-Durham-Chapel Hill, NC MSA | 2.81% | 1,915,921 | 3,367,680 | 75.8% | 28.5 | 28.9 | **20.42** |
| Richmond-Petersburg, VA MSA | 1.10% | 1,852,686 | 2,918,465 | 57.5% | 25.8 | 22.4 | **3.43** |
| Sacramento-Yolo, CA CMSA | 1.82% | 3,189,230 | 4,323,616 | 35.6% | 24.1 | 27.4 | **23.28** |
| St Louis, MO-IL MSA | 0.19% | 5,340,149 | 7,238,204 | 35.5% | 15.9 | 18.5 | **-2.58** |
| Salt Lake City-Ogden, UT MSA | 1.35% | 2,444,381 | 4,229,352 | 73.0% | 27.4 | 26.1 | **1.31** |
| San Antonio, TX MSA | 2.11% | 2,700,361 | 3,930,702 | 45.6% | 24.5 | 25.4 | **-0.94** |
| San Diego, CA MSA | 2.09% | 5,724,318 | 7,778,894 | 35.9% | 24.8 | 27.2 | **-2.34** |
| SanFran-Oakland, CA PMSA | 1.96% | 16,283,843 | NA | NA | 19.0 | 21.9 | **22.97** |
| SanFran-San Francisco, CA PMSA | 0.82% | 16,283,843 | NA | NA | 13.7 | 21.1 | **-7.43** |
| SanFran-San Jose, CA PMSA | 1.28% | 16,283,843 | NA | NA | 20.8 | 26.4 | **-5.59** |
| Seattle-Tacoma-Bremerton, WA CMSA | 1.36% | 7,814,127 | 11,084,954 | 41.9% | 21.4 | 29.4 | **27.94** |
| Tampa-St Petersburg-Clearwater, FL MSA | 1.42% | 4,053,102 | 6,310,710 | 55.7% | 33.9 | 31.0 | **2.84** |
| Wash-Baltimore, MD PMSA | 0.32% | 15,524,076 | 21,867,795 | 40.9% | 18.4 | 19.3 | **-0.9** |
| Wash-Washington, DC-MD-VA-WV PMSA | 1.40% | 15,524,076 | 21,867,795 | 40.9% | 21.8 | 24.3 | **22.44** |

GAFO: General Merchandise, Apparel & Accessories, Furniture & Furnishings, and Other

Sources: GAFO and population: US Census Bureau
GLA per capita: Eppli M. and Laposa S.

## Table E1- Characteristics of the Hotel Market

| | Number of hotels | Number of rooms | | | Con-struction as % of inventory | Ranking by per capita inventory | Occup. Rate | From January to September | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Occupancy Rate | | | Average Price per Room | | | Total Revenue | | |
| | 1998 | Estim. 97 | 1998 | Estim. 99 | 1998 | 1998 | 1998 | 1999 | 1998 | 99-98% | 1999 | 1998 | 99-98% | 99 | 98 | 99-98% |
| Atlanta | 561 | 73,011 | 77,100 | 81,418 | 5.60% | 9 | 65.1% | 67.0% | 66.7% | 0.4% | 79.94 | 78.25 | 2.2% | 4,360,710 | 4,024,061 | 8.4% |
| Austin | | | | | 7.90% | 18 | 67.6% | | | | | | | | | |
| Baltimore | | | | | 11.50% | 52 | 68.9% | 72.8% | 73.5% | -1.0% | 131.36 | 124.35 | 5.6% | | 0 | 12.2% |
| Boston | 234 | 34,684 | 36,800 | NA | 6.10% | 46 | 72.8% | 77.0% | 79.0% | -2.5% | 184 | 177 | 4.0% | | | |
| Charlotte | | | | | 12.30% | 16 | 63.4% | | | | | | | | | |
| Chicago | 418 | 69,245 | 73,400 | 76,336 | 6.00% | 43 | 71.2% | 70.3% | 71.0% | -1.0% | 109.51 | 105.39 | 3.9% | 5,876,767 | 5,492,294 | 7.0% |
| Cincinnati | | | | | 5.10% | 33 | 58.9% | | | | | | | | | |
| Cleveland | | | | | 6.80% | 48 | 64.2% | | | | | | | | | |
| Columbus | | | | | 8.30% | 31 | 64.6% | | | | | | | | | |
| Dallas | 361 | 48,843 | 54,900 | | 12.40% | 11 | 66.2% | 64.4% | 68.0% | -5.3% | 82.4 | 81.28 | 1.4% | 0 | 0 | 9.1% |
| Denver | 194 | 28,925 | 30,400 | | 5.10% | 26 | 69.7% | 69.0% | 71.7% | -3.8% | 78.68 | 78.8 | -0.2% | 0 | 0 | 8.0% |
| Detroit | 270 | 33,005 | 33,500 | 35,175 | 1.50% | 54 | 66.1% | 69.7% | 68.0% | 2.5% | 77.07 | 72.72 | 6.0% | 1,889,523 | 1,656,562 | 14.0% |
| Fairfield-New Haven | | | | | 4.10% | 53 | 65.5% | | | | | | | | | |
| Fort Lauderdale | 239 | 22,271 | 25,300 | NA | 13.60% | 10 | 68.4% | | | | | | | | | |
| Fort Worth | | | | | 12.80% | 44 | 61.9% | | | | | | | | | |
| Greensboro | | | | | 7.30% | 32 | 62.1% | | | | | | | | | |
| Greenville | | 10,402 | 11,036 | | 6.10% | 42 | 58.4% | | | | | | | | | |
| Hartford | | | | | 2.40% | 55 | 67.7% | | | | | | | | | |
| Houston | 318 | 45,213 | 47,700 | | 5.50% | 29 | 64.0% | 61.2% | 64.7% | -5.4% | 74.17 | 73.86 | 0.4% | 0 | 0 | 2.7% |
| Indianapolis | | | | | 2.40% | 24 | 61.9% | | | | | | | | | |
| Jacksonville | | 18,721 | 20,031 | | 7.00% | 12 | 62.5% | | | | | | | | | |
| Kansas City | | 21,865 | 22,849 | | 4.50% | 20 | 65.5% | | | | | | | | | |
| Las Vegas | 265 | 105,660 | 112,000 | | 6.00% | 1 | 78.4% | | | | | | | | | |
| Los Angeles | 653 | 79,842 | 80,800 | | 1.20% | 41 | 69.6% | 70.5% | 69.6% | 1.3% | 91.81 | 88.5 | 3.7% | 0 | 0 | 6.2% |
| Miami | 255 | 39,225 | 41,500 | 43,658 | 5.80% | 5 | 70.6% | 69.6% | 70.2% | -0.9% | 107.4 | 100.29 | 7.1% | 3,263,453 | 2,921,749 | 11.7% |
| Milwaukee | | | | | 5.00% | 56 | 63.9% | | | | | | | | | |
| Minneapolis | 230 | 28,134 | 29,400 | | 4.50% | 34 | 68.5% | 69.7% | 70.9% | -1.7% | 80.8 | 79.99 | 1.0% | 0 | 0 | 4.6% |
| Nashville | 238 | 27,298 | 29,100 | | 6.60% | 8 | 63.1% | 62.2% | 62.7% | -0.8% | 74.05 | 74.14 | -0.1% | 0 | 0 | 3.7% |
| Nassau | | | | | 3.00% | 58 | 74.7% | | | | | | | | | |
| New Orleans | 154 | 27,273 | 28,200 | | 3.40% | 7 | 68.3% | 70.3% | 70.6% | -0.4% | 113.94 | 107.83 | 5.7% | 0 | 0 | 8.4% |
| New York | 248 | 66,634 | 68,300 | | 2.50% | 50 | 81.3% | 80.7% | 81.2% | -0.6% | 178.6 | 172.09 | 3.8% | 0 | 0 | 6.9% |

## Table E1- Characteristics of the Hotel Market

|  | Number of hotels | Number of rooms |  |  | Con-struction as % of inventory | Ranking by per capita inventory | Occup. Rate | From January to September |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  | Occupancy Rate |  |  | Average Price per Room |  |  | Total Revenue |  |  |
|  | *1998* | *Estim. 97* | *1998* | *Estim. 99* | *1998* | *1998* | *1998* | *1999* | *1998* | *99-98%* | *1999* | *1998* | *99-98%* | *99* | *98* | *99-98%* |
| Newark |  |  |  |  | 0.00% | 47 | 75.4% |  |  |  |  |  |  |  |  |  |
| Norfolk | 313 | 32,427 | 33,400 |  | 3.00% | 21 | 59.4% | 60.6% | 62.0% | -2.3% | 72.53 | 69.52 | 4.3% | 0 | 0 | 4.1% |
| Oakland |  |  |  |  | 9.70% | 57 | 73.1% |  |  |  |  |  |  |  |  |  |
| Oklahoma City |  |  |  |  | 8.60% | 36 | 55.7% |  |  |  |  |  |  |  |  |  |
| Orange County |  |  |  |  | 3.70% | 15 | 65.1% |  |  |  |  |  |  |  |  |  |
| Orlando | 350 | 88,219 | 95,100 | 100,806 | 7.80% | 2 | 75.3% | 74.0% | 76.6% | -3.4% | 84.07 | 82.36 | 2.1% | 6,271,323 | 5,999,646 | 4.6% |
| Philadelphia | 223 | 30,347 | 31,500 | 34,524 | 3.80% | 51 | 69.0% | 69.1% | 69.2% | -0.1% | 96.9 | 95.34 | 1.6% | 2,311,655 | 2,078,221 | 11.2% |
| Phoenix | 310 | 40,950 | 45,700 |  | 11.60% | 19 | 65.2% | 62.9% | 65.6% | -4.1% | 98.35 | 99.95 | -1.6% | 0 | 0 | 4.0% |
| Pittsburgh |  |  |  |  | 2.70% | 49 | 63.5% |  |  |  |  |  |  |  |  |  |
| Portland |  |  |  |  | 9.70% | 45 | 62.2% |  |  |  |  |  |  |  |  |  |
| Raleigh |  | 17,153 | 18,491 |  | 7.80% | 17 | 65.1% |  |  |  |  |  |  |  |  |  |
| Richmond |  |  |  |  | 4.70% | 30 | 61.9% |  |  |  |  |  |  |  |  |  |
| Riverside |  |  |  |  | 1.10% | 35 | 59.2% |  |  |  |  |  |  |  |  |  |
| Sacramento |  |  |  |  | 6.70% | 39 | 62.0% |  |  |  |  |  |  |  |  |  |
| Salt Lake |  | 16,217 | 17,450 |  | 7.60% | 27 | 64.5% |  |  |  |  |  |  |  |  |  |
| San Antonio | 198 | 26,400 | 26,400 |  | 0.00% | 23 | 64.8% | 65.0% | 65.0% |  | 86 | 83 | 3.6% |  |  |  |
| San Diego | 393 | 45,130 | 46,800 |  | 3.70% | 14 | 73.1% | 76.2% | 75.8% | 0.5% | 103.23 | 97 | 6.4% | 0 | 0 | 8.5% |
| San Francisco | 307 | 41,643 | 43,100 |  | 3.50% | 4 | 77.8% | 79.3% | 79.6% | -0.4% | 135.01 | 127.14 | 6.2% | 0 | 0 | 8.5% |
| San Jose |  |  |  |  | 8.10% | 37 | 75.2% |  |  |  |  |  |  |  |  |  |
| Seattle | 249 | 26,884 | 28,900 |  | 7.50% | 28 | 71.5% | 71.1% | 75.1% | -5.3% | 96.85 | 93.77 | 3.3% | 0 | 0 | 5.5% |
| St. Louis | 211 | 28,218 | 28,500 |  | 1.00% | 38 | 62.5% | 64.5% | 63.8% | 1.1% | 70.14 | 69.92 | 0.3% | 0 | 0 | 6.5% |
| Tampa | 312 | 34,844 | 36,900 | 38,376 | 5.90% | 22 | 64.0% | 67.0% | 66.3% | 1.1% | 82.82 | 79.01 | 4.8% | 2,129,461 | 1,932,956 | 10.2% |
| W. Palm |  |  |  |  | 4.20% | 6 | 68.5% |  |  |  |  |  |  |  |  |  |
| Washington | 387 | 68,577 | 71,800 |  | 4.70% | 13 | 72.1% | 72.9% | 71.8% | 1.5% | 108.9 | 103.99 | 4.7% | 0 | 0 | 10.6% |

Sources: F.W. Dodge Analytics and Smith Travel Research

## GUIDE D'ENTREVUE COMPLET

1-Introduction au marché

Pourquoi l'entreprise opère-t-elle aux États-Unis ? Depuis quand ? Est-elle américaine ?
Produit : Type (multifamiliale, bureaux et commercial); Caractéristiques, segment et particularités, Gamme du produit, degré de finition, efficacité énergétique, etc
Clients: Donneurs d'ordres (activité principale et type), Nombre de clients, Types de contrats: à forfait, clés en main, etc.
Régions : Raison de première région cible ; Stratégie de choix d'une région (taille, décalage horaire, croissance), Mode d'évaluation des opportunités de marché (à qui on a parlé), Opportunité du micro-marché (déséquilibre identifié)
Taille relative de l'entreprise sur le marché américain: Expertise, reconnue, Profondeur et part des activités américaines, Croissance prévue, Portefeuille régional..
L'image qu'on se faisait au début a-t-elle changé ? Pourquoi, dans quel sens ? Quels serait le meilleur critère de décision pour s'engager sur le marché américain?

2-Chaîne de mise en oeuvre du projet

A- Alliances
Quelles alliances (au sens large) avez-vous fait : précisez le type d'alliances américaines et canadiennes (analystes, représentants par marché, co-entreprises, etc);
Comment exactement êtes-vous entré en contact, Fréquence et intensité de relations, Raisons de choix (familiarité locale, compatibilité et complémentarité d'expertises ou de culture, nouveaux réseaux de contacts,...)
Évaluation: Distribution du financement, du travail, des risques et du profit, Enjeux de confiance et d'intégrité, Contrôle des coûts, Stabilité de relation...

B- Terrains
Exploration
Disponibilité, coûts, rentabilité
Méthodes: propriété, assemblage

C- Codes
Environnement légal, codes et règlements particuliers, Modifications requises au produit canadien, Attitudes des administrateurs locaux et interprétation par les inspecteurs
Architecte : Nationalité, Taille et poids dans le marché, Ententes réciproques,...

D- Enjeux particuliers à relever
Erreurs précises commises en cours de route
Pratiques américaines incontournables et spécifiques
Facilité de pénétration : Engagements préalables requis en termes d'argent, de temps, de contacts, de ressources

3- Mode d'assemblage des ressources

A- Gestion
Engagement local, associations, réseautage, participation à des événements de mise en valeur...
Gestion à distance: localisation des bureaux aux États-Unis, organisation du chantier, présence sur le site, production assistée par ordinateur et télécommunications,
Importance de la technologie du produit comme facteur de succès..
Temps, ressources et travail dévolus

B- Main d'œuvre
Contrôle de coûts, disponibilité et échéancier de travail, syndicats, assurances (obligations), coûts-efficacité-qualité
Impartition: Méthodes d'accès aux sous-contractants par composante (choix, références, coût, habiletés)
Permis de travail temporaire et permanent : difficultés et longueur d'obtention, immigration,...
Nombre d'employés américains permanents ou sur base de projet

C- Matériaux

Coûts relatifs, disponibilité, qualité, climat, problèmes et délais normaux de livraison, nouveaux produits alternatifs, contrôle des coûts
Type de fournisseurs (manufacturier, grossiste, COOP, détaillant): filières et modes d'approvisionnement, demandes spécifiques par le marché, garanties, service
Possibilités d'importation du manufacturier canadien, nature de l'engagement au Buy America.

### D- Financement

Structure de l'entreprise, financement canadien
Financement américain: exigences préalables en termes d'équité, coûts- disponibilité- attitude et nom des banques, rendement attendu sur équité
Marges nécessaires: Gestion de l'encaisse compte tenu de paiements progressifs, température, tec.
Couverture de risques de change,...

### 4- Vision de long terme

Caractéristiques uniques de votre produit : compétence distinctive, valeur ajoutée, concurrence, défis à relever, évaluation de nouveaux projets,...
Expansion: Cibler les marchés, évaluer les opportunités, Méthodes d'accès à la base de clients et au pipeline d'offres (projets sur les tables à dessin), Tendance de votre industrie dans des marchés spécifiques, Délai de mise en oeuvre d'un projet
Tendances: Sophistication des produits et du marketing, changements majeurs à présager
Résultats financiers: marges de profit comparatives à celles du Canada
Appuis et liens souhaitables: instances publiques, autres entrepreneurs canadiens dans le marché américain

## GUIDE SOMMAIRE D'ENTREVUES À ENVOYER

### 1- Introduction au marché

Pourquoi l'entreprise opère-t-elle aux États-Unis?
Depuis quand? Évaluation des opportunités de marché
Caractéristiques du développement: type, taille, activités, finition
Pourquoi cette région cible, cette localisation précise, niche de marché visée
Part des affaires aux États-Unis
Critère principal de décision suggéré pour débuter sur ce marché

### 2- Chaîne de mise en oeuvre du projet

Alliances américaines (au sens large), canadiennes, appuis des instances publiques: types et intensité des relations, raisons, évaluation, partage de risques et de profits
Terrains: exploration, disponibilités, modes d'accès
Approches face à différentes barrières: permis, codes, particularités des pratiques et attitudes
Enjeux/défis principaux à relever : erreurs commises, engagements préalables requis
Meilleurs moyens pour établir une proximité

### 3- Mode d'assemblage des ressources

Gestion: engagement local requis, gestion à distance, organisation du chantier, temps et ressources, importance de la technologie du produit comme facteur de succès.
Main d'œuvre et sous-traitants: disponibilité, syndicats, assurances, coûts, efficacité-qualité, permis
Matériaux: coûts relatifs, qualité, délais d'approvisionnement, possibilités d'importation du Canada
Financement: structure fiscale de l'entreprise, besoins d'équité, attitudes des banquiers, couverture de change
Autres problématiques soulevées

### 4-Vision de long terme

Concurrence: différences, évaluation, unicité de votre produit
Expansion et recherche de marchés: filières utilisées, évaluation des opportunités
Temps requis pour formaliser un nouveau projet
Nouvelles tendances: cycles de croissance, territoires, modes de fonctionnement
Résultats financiers: marges de profits actuels et visés
Appuis et liens souhaitables avec instances publiques et autres développeurs canadiens

# COMPLETE INTERVIEW GUIDE

1- To start with

When did you start in the American market?
Why? Broaden geographical space, balance the home cycle...
Product: Type (residential, commercial, retail,...), Particular segment, Upscale, Finishing stage, Energy efficient, importance of the technology of the product as means of success.
Clients: Principal's activity and sector, Number of clients, Types of contracts: biding or negotiated, immediate possession, lump sum (guaranteed maximum price) or cost plus fee.
Regions: Reasons (size, time zone, growth), Evaluation (How, to whom did you speak), Micro-market (opportunity, imbalances..)
Size of business: Recognized expertise in a specialty, Breath of US portfolio (% of business in the US), Growth to foresee
Was the first representation you had of such a business accurate? In what sense is it different? Do you regret it?

2-Setting up your project

A- Partnerships
Relation: Types (US market analyst, Representatives or local managers by project, Joint ventures); How did you meet? Frequency and intensity of your relations
Reasons of choice: local familiarity, knowledge and expertise, assumes entrance fees, financial soundness, same business language, easy to manage relations, fast response, complexity of the projects
Evaluation: Efficiency, Honesty et confidence issues, Stability of relation, Cost control, Overhead costs, Strict reporting, Risk sharing, Profit sharing, Quality staffing with experience

B- Land
Finding: exploration
Availability, cost, profitability
Methods: Buying, Servicing, And Assembling

C- Codes
Cultural and legal environment: Planning regulations, Interpretation by local inspectors, Changes to Canadian product, Attitudes of local administration
Architecture, price: local knowledge

D- Special challenges
Mistakes done or misapprehensions
American business practices peculiar and unavoidable
Ease of entry: Initial commitments in terms of money, time, resources and contacts to start in this market

3-Resource assembly

A- Management:
Mandatory local commitment, trade shows, networking, associations
Managing in a distance: Location of branch offices, Internet effect
Devotion of time, resources and work

B- Labour pool
Cost control, Scheduling, Unions, Assurances[Insurance??], Efficiency, Quality
Outsourcing: Sub-trader's choice, references and costs, Pride in workmanship, Skills
Work permits and NAFTA
American workforce: number, type, permanent or hired on a project basis

C- Materials
Cost, Availability, Average delivery lead-time, Alternative products and new products information
Suppliers (local dealers, manufacturers, distributors): Quality, Specific demands by the market, Warranties, Service
Possibilities and opportunities for Canadian suppliers, commitment to Buy America.

D- Financing
Company structure, Canadian financing
American financing: equity needs, attitude of American bankers, return on equity,
Margins: Cash control management, retainer after completion of project, weather, progress payments..
Risk of exchange rates

4-Long-term issues

Competition: Differences, Competitive advantage, Challenges to overcome, Evaluation of new projects, Business practices peculiar to your industry; diversification in other types of construction
Growth: Targeting your specific markets, Evaluating opportunities, brokers, best ways to access new clients et information on new projects of your competitors, Industry trends in geographical areas, Length of time to formalize a new project
New trends: Major shifts to foresee, Handling marketing and product sophistication
Financial results: Profit margins compared to Canada
Desirable support links: Canadian government and other Canadian developers in the American market

## INTERVIEW GUIDE TO SEND

1- To start with
When did you start in the American market?
Why? How did you evaluate the opportunities?
Product type, specialty, finishing stage, Importance of technology as means of success..
Regions: why, how to choose
% of business in the US? Regional portfolio?
Major criteria to use for decision to start business in this market

2-Setting up your project
Partnerships: Type, frequency and intensity of your relations, Reasons of choice, Evaluation, Risk and profit sharing
Land: Exploration, Availability, Cost, Profitability, Methods
Codes: Tough regulations, Interpretation by local inspectors, Architecture, Local knowledge
Special challenges: barriers to entry, mistakes to overcome, peculiar American practices, Initial commitments
Best means to establish proximity

3-Resource assembly
Management: Mandatory local commitment and networking, Managing in a distance, Branch offices
Labour pool and sub-traders: Availability, skills, cost and quality control, Work permits and NAFTA,
Materials: Cost and delivery problems, Suppliers (types, warranties...), opportunities for Canadian businesses
Financing: Company structure, Equity needs, Attitude of American bankers, Return on equity, Margins and cash control management, Risk of exchange rates

4-Long-term issues
Competition: Differences, Competitive advantage, Challenges to overcome, Evaluation of new supply to foresee
Market expansion: Research process, Targeting specific markets, Evaluating opportunities, Length of time to formalize the project
New trends in your business
Financial results: Profit margins compared to Canada
Desirable support from the Canadian government, links with other Canadian developers in the American market.